ALPHA ANALYTICAL

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com
MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: GZA GeoEnvironmental, Inc.
Address: 106 South Street
Hopkinton, MA 01748
Attn: Sampling & Receiving
Project Number: 19395.2

Laboratory Job Number: L0815829
Date Received: 27-OCT-2008
Date Reported: 03-NOV-2008
Delivery Method: Alpha
Site: PCB

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0815829-01	PCB1.BETWEEN 9&11	NEPAUG DAM
L0815829-02	PCB2.BETWEEN 9&7	NEPAUG DAM
L0815829-03	PCB3.BETWEEN 10&8	NEPAUG DAM
L0815829-04	PCB4.BETWEEN 5&3	NEPAUG DAM
L0815829-05	PCB5.BETWEEN 6&8	NEPAUG DAM
L0815829-06	PCB6.RIGHT GH CORNER	NEPAUG DAM
L0815829-07	PCB7.BRIDGE DECK	NEPAUG DAM
L0815829-08	PCB8.D/S RIGHT SPLWY	NEPAUG DAM

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Michelle M. Morris
Technical Representative

ALPHA ANALYTICAL
NARRATIVE REPORT

Laboratory Job Number: L0815829

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

PCB

L0815829-01 through -08, and the associated QC, have elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrices.

L0815829-01, -02 and -06 were extracted using only 2 grams due to limited sample volume.

L0815829-01 has elevated detection limits due to the 4x dilution required by the matrix interferences encountered during the concentration of the sample and the 20x dilution required by the elevated concentrations of target compounds in the sample.

L0815829-02 through -06 have elevated detection limits due to the 4x dilutions required by matrix interferences encountered during the concentration of the samples.

L0815829-08 has elevated detection limits due to the 7x dilution required by matrix interferences encountered during the concentration of the sample.

The surrogate recoveries for L0815829-01 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene and Decachlorobiphenyl (both ND) due to the dilutions required to quantitate the sample. Re-extraction is not required; therefore, the results of the original analysis are reported.

The surrogate recovery for L0815829-02 through -06 is above the acceptance criteria for Decachlorobiphenyl (1460%, 2630%, 2880%, 1740%, and 2450%, respectively); however, the samples were not re-extracted due to coelution with obvious interferences. Copies of the chromatograms are included as an attachment to this report. The results are not considered to be biased.

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

SAMPLE NARRATIVES

PCB WG342078: Alpha samples

L0815829-01 has elevated detection limits due to the 4 x dilution required by the matrix interferences encountered during the concentration of the sample and the 20x dilution required by the elevated concentrations of target compounds in the sample.' 'PCB/PEST-S The surrogate recoveries for L0815829-01 are below the acceptance criteria for Tetrachloro-m-xylene and decachlorobiphenyl due to the dilutions required to quantitate the sample. Re-extraction is not required; therefore, the results of the original analysis are reported.'

PCB/PEST-S 4B: L0815829-02 has elevated detection limits due to the 4x dilution required by matrix interferences encountered during the concentration of the sample. 'PCB/PEST-S The surrogate recoveries for L0815829-02 are outside the acceptance criteria for

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decachlorobiphenyl ; however, the sample was not re-extracted due to coelution with obvious interferences. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.'

PCB/PEST-S 4B: L0815829-03 has elevated detection limits due to the 4x dilution required by matrix interferences encountered during the concentration of the sample. 'PCB/PEST-S The surrogate recoveries for L0815829-03 are outside the acceptance criteria for decachlorobiphenyl; however, the sample was not re-extracted due to coelution with obvious interferences. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.'

PCB/PEST-S 4B: L0815829-04 has elevated detection limits due to the 4x dilution required by matrix interferences encountered during the concentration of the sample. 'PCB/PEST-S The surrogate recoveries for L0815829-04 are outside the acceptance criteria for decachlorobiphenyl; however, the sample was not re-extracted due to coelution with obvious interferences. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.'

PCB/PEST-S 4B: L0815829-05 has elevated detection limits due to the 4x dilution required by matrix interferences encountered during the concentration of the sample. 'PCB/PEST-S The surrogate recoveries for L0815829-05 are outside the acceptance criteria for decachlorobiphenyl; however, the sample was not re-extracted due to coelution with obvious interferences. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.'

PCB/PEST-S 4B: L0815829-06 has elevated detection limits due to the 4x dilution required by matrix interferences encountered during the concentration of the sample. 'PCB/PEST-S The surrogate recoveries for L0815829-06 are outside the acceptance criteria for decachlorobiphenyl; however, the sample was not re-extracted due to coelution with obvious interferences. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.'

PCB/PEST-S L0815829-08 and it's associated QC have elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix. 'PCB/PEST-S 4B: L0815829-08 has elevated detection limits due to the 7x dilution required by matrix interferences encountered during the concentration of the sample.'

QC SAMPLES

PCB/PEST-S L815829-01 to 08 and it's associated QC have elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0815829-01
PCB1.BETWEEN 9&11
Sample Matrix: SOLID

Date Collected: 23-OCT-2008 10:30
Date Received : 27-OCT-2008
Date Reported : 03-NOV-2008

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls				1	8082	1028 23:30	1031 09:56	SH
Aroclor 1016	ND	ug/kg	20000					
Aroclor 1221	ND	ug/kg	20000					
Aroclor 1232	ND	ug/kg	20000					
Aroclor 1242	ND	ug/kg	20000					
Aroclor 1248	ND	ug/kg	20000					
Aroclor 1254	ND	ug/kg	20000					
Aroclor 1260	189000	ug/kg	20000					
Aroclor 1262	ND	ug/kg	20000					
Aroclor 1268	ND	ug/kg	20000					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	ND	%	30-150					
Decachlorobiphenyl	ND	%	30-150					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0815829-02
PCB2.BETWEEN 9&7
Sample Matrix: SOLID

Date Collected: 23-OCT-2008 11:00
Date Received : 27-OCT-2008
Date Reported : 03-NOV-2008

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls				1	8082	1028 23:30	1031 07:06	SH
Aroclor 1016	ND	ug/kg	1000					
Aroclor 1221	ND	ug/kg	1000					
Aroclor 1232	ND	ug/kg	1000					
Aroclor 1242	ND	ug/kg	1000					
Aroclor 1248	ND	ug/kg	1000					
Aroclor 1254	ND	ug/kg	1000					
Aroclor 1260	ND	ug/kg	1000					
Aroclor 1262	ND	ug/kg	1000					
Aroclor 1268	ND	ug/kg	1000					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	46.0	%	30-150					
Decachlorobiphenyl	1460	%	30-150					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0815829-03
PCB3.BETWEEN 10&8
Sample Matrix: SOLID

Date Collected: 23-OCT-2008 11:40
Date Received : 27-OCT-2008
Date Reported : 03-NOV-2008

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls				1	8082	1028 23:30	1031 07:18	SH
Aroclor 1016	ND	ug/kg	400.					
Aroclor 1221	ND	ug/kg	400.					
Aroclor 1232	ND	ug/kg	400.					
Aroclor 1242	ND	ug/kg	400.					
Aroclor 1248	ND	ug/kg	400.					
Aroclor 1254	ND	ug/kg	400.					
Aroclor 1260	ND	ug/kg	400.					
Aroclor 1262	ND	ug/kg	400.					
Aroclor 1268	ND	ug/kg	400.					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	39.0	%	30-150					
Decachlorobiphenyl	2630	%	30-150					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0815829-04
PCB4.BETWEEN 5&3
Sample Matrix: SOLID

Date Collected: 23-OCT-2008 11:10
Date Received : 27-OCT-2008
Date Reported : 03-NOV-2008

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls				1	8082	1028 23:30	1031 07:42	SH
Aroclor 1016	ND	ug/kg	400.					
Aroclor 1221	ND	ug/kg	400.					
Aroclor 1232	ND	ug/kg	400.					
Aroclor 1242	ND	ug/kg	400.					
Aroclor 1248	ND	ug/kg	400.					
Aroclor 1254	ND	ug/kg	400.					
Aroclor 1260	ND	ug/kg	400.					
Aroclor 1262	ND	ug/kg	400.					
Aroclor 1268	ND	ug/kg	400.					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	53.0	%	30-150					
Decachlorobiphenyl	2880	%	30-150					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0815829-05
PCB5.BETWEEN 6&8
Sample Matrix: SOLID

Date Collected: 23-OCT-2008 11:30
Date Received : 27-OCT-2008
Date Reported : 03-NOV-2008

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls				1	8082	1028 23:30	1031 10:26	SH
Aroclor 1016	ND	ug/kg	400.					
Aroclor 1221	ND	ug/kg	400.					
Aroclor 1232	ND	ug/kg	400.					
Aroclor 1242	ND	ug/kg	400.					
Aroclor 1248	ND	ug/kg	400.					
Aroclor 1254	ND	ug/kg	400.					
Aroclor 1260	ND	ug/kg	400.					
Aroclor 1262	ND	ug/kg	400.					
Aroclor 1268	ND	ug/kg	400.					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	65.0	%	30-150					
Decachlorobiphenyl	1740	%	30-150					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0815829-06
PCB6.RIGHT GH CORNER
Sample Matrix: SOLID

Date Collected: 23-OCT-2008 11:20
Date Received : 27-OCT-2008
Date Reported : 03-NOV-2008

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls				1	8082	1028 23:30	1031 08:09	SH
Aroclor 1016	ND	ug/kg	1000					
Aroclor 1221	ND	ug/kg	1000					
Aroclor 1232	ND	ug/kg	1000					
Aroclor 1242	ND	ug/kg	1000					
Aroclor 1248	ND	ug/kg	1000					
Aroclor 1254	ND	ug/kg	1000					
Aroclor 1260	ND	ug/kg	1000					
Aroclor 1262	ND	ug/kg	1000					
Aroclor 1268	ND	ug/kg	1000					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	49.0	%	30-150					
Decachlorobiphenyl	2450	%	30-150					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0815829-07
PCB7.BRIDGE DECK
Sample Matrix: SOLID

Date Collected: 23-OCT-2008 12:00
Date Received : 27-OCT-2008
Date Reported : 03-NOV-2008

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls				1	8082	1028 23:30	1031 08:20	SH
Aroclor 1016	ND	ug/kg	100.					
Aroclor 1221	ND	ug/kg	100.					
Aroclor 1232	ND	ug/kg	100.					
Aroclor 1242	ND	ug/kg	100.					
Aroclor 1248	ND	ug/kg	100.					
Aroclor 1254	ND	ug/kg	100.					
Aroclor 1260	ND	ug/kg	100.					
Aroclor 1262	ND	ug/kg	100.					
Aroclor 1268	ND	ug/kg	100.					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	34.0	%	30-150					
Decachlorobiphenyl	88.0	%	30-150					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:2003 CT:PH-0574 ME:MA0086 RI:LAO00065 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0815829-08
PCB8.D/S RIGHT SPLWY
Sample Matrix: SOLID

Date Collected: 23-OCT-2008 12:30
Date Received : 27-OCT-2008
Date Reported : 03-NOV-2008

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

Comments:
Results are reported on an 'AS RECEIVED' basis.

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Polychlorinated Biphenyls				1	8082	1031 18:00	1103 13:18	SH
Aroclor 1016	ND	ug/kg	700.					
Aroclor 1221	ND	ug/kg	700.					
Aroclor 1232	ND	ug/kg	700.					
Aroclor 1242	ND	ug/kg	700.					
Aroclor 1248	ND	ug/kg	700.					
Aroclor 1254	ND	ug/kg	700.					
Aroclor 1260	ND	ug/kg	700.					
Aroclor 1262	ND	ug/kg	700.					
Aroclor 1268	ND	ug/kg	700.					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	117	%	30-150					
Decachlorobiphenyl	101	%	30-150					

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0815829

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Polychlorinated Biphenyls for sample(s) 01-07 (WG341698-2, WG341698-3)					
Aroclor 1016	94	105	11	50	40-140
Aroclor 1260	71	72	1	50	40-140
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	64	64	0		30-150
Decachlorobiphenyl	73	75	3		30-150
Polychlorinated Biphenyls for sample(s) 08 (WG342273-2, WG342273-3)					
Aroclor 1016	68	82	19	50	40-140
Aroclor 1260	75	89	17	50	40-140
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	62	70	12		30-150
Decachlorobiphenyl	104	117	12		30-150

ALPHA ANALYTICAL
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0815829

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-07 (WG341698-1)								
Polychlorinated Biphenyls				1	8082	1028 23:30	1031 06:19	SH
Aroclor 1016	ND	ug/kg	100.					
Aroclor 1221	ND	ug/kg	100.					
Aroclor 1232	ND	ug/kg	100.					
Aroclor 1242	ND	ug/kg	100.					
Aroclor 1248	ND	ug/kg	100.					
Aroclor 1254	ND	ug/kg	100.					
Aroclor 1260	ND	ug/kg	100.					
Aroclor 1262	ND	ug/kg	100.					
Aroclor 1268	ND	ug/kg	100.					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	59.0	%	30-150					
Decachlorobiphenyl	67.0	%	30-150					
Blank Analysis for sample(s) 08 (WG342273-1)								
Polychlorinated Biphenyls				1	8082	1031 18:00	1103 12:08	SH
Aroclor 1016	ND	ug/kg	100.					
Aroclor 1221	ND	ug/kg	100.					
Aroclor 1232	ND	ug/kg	100.					
Aroclor 1242	ND	ug/kg	100.					
Aroclor 1248	ND	ug/kg	100.					
Aroclor 1254	ND	ug/kg	100.					
Aroclor 1260	ND	ug/kg	100.					
Aroclor 1262	ND	ug/kg	100.					
Aroclor 1268	ND	ug/kg	100.					
Surrogate(s)	Recovery		QC Criteria					
2,4,5,6-Tetrachloro-m-xylene	65.0	%	30-150					
Decachlorobiphenyl	107	%	30-150					

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.
H	The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 10/27

ALPHA Job #: L0815829

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: GZA
Address: One Edgewater Drive Norwood, MA
Phone: 781 278 5848
Fax: 781 278 5701
Email: lmiller@gza.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: PCB
Project Location: Nepaug Dam
Project #: 19395.2
Project Manager: David E Leone
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 11/3 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO-

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
Manual Soxhlet Extraction 3540C

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: PCB - Manual Soxhlet	SAMPLE HANDLING	TOTAL # BOTTLES
5829.1	PCB1 - Between 9&11	10/23/08	10:30	Caulk	LGM	X		
2	PCB2 Between 9&7		11:00			X		
3	PCB3 Between 10&8		11:40			X		
4	PCB4 Between 5&3		11:10			X		
5	PCB5 Between 6&8		11:30			X		
6	PCB6 Right GH Corner		11:20			X		
7	PCB7 Bridge Deck		12:00			X		
8	PCB8 D/S Right Spillway		12:30			X		

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

Container Type: Glass
Preservative: None

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

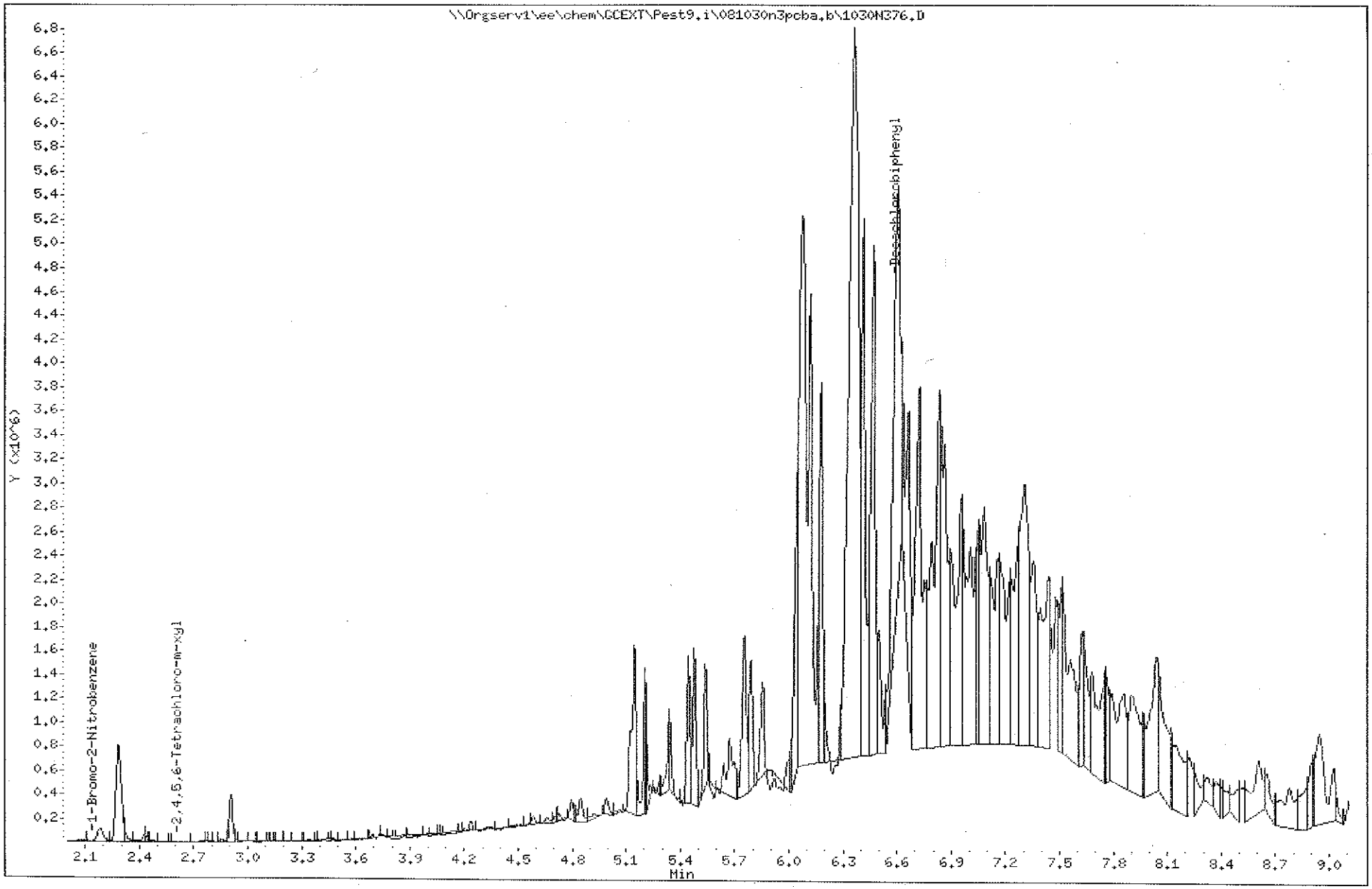
Relinquished By:	Date/Time	Received By:	Date/Time
David E. Miller	10/27/08 1525	Dan Combs	10/27/08 1525
Dan Combs	10/27/08 1700		10/27 1700

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

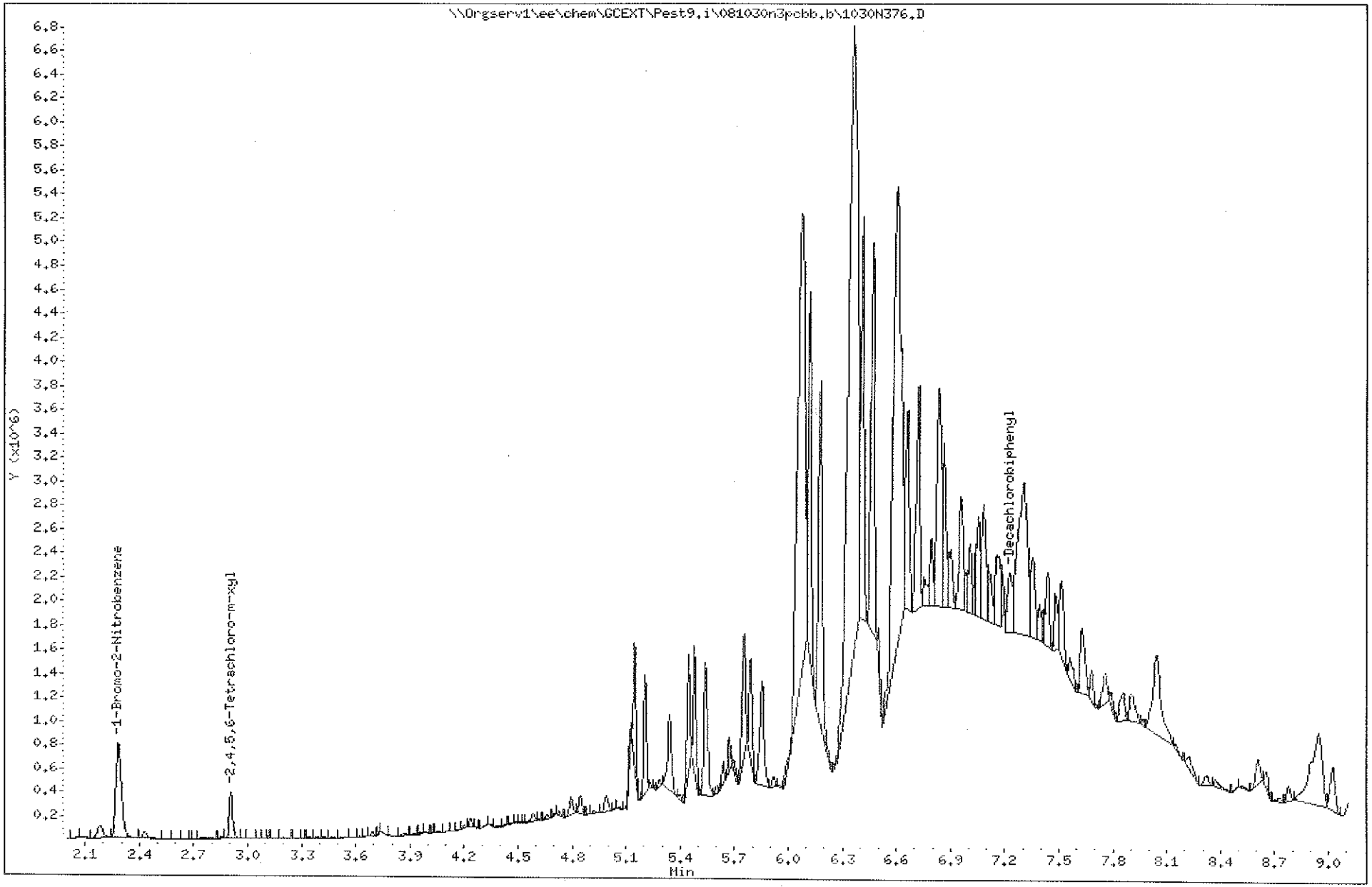
Data File: \\Orgserv1\ee\chem\GCEXT\Pest9.i\081030n3pcba.b\1030N376.D
Date : 31-OCT-2008 07:06
Client ID:
Sample Info: 10815829-02.4, Pv4

Instrument: Pest9.i
Operator: sh
Column phase: Rtx-1701
Column diameter: 0.32



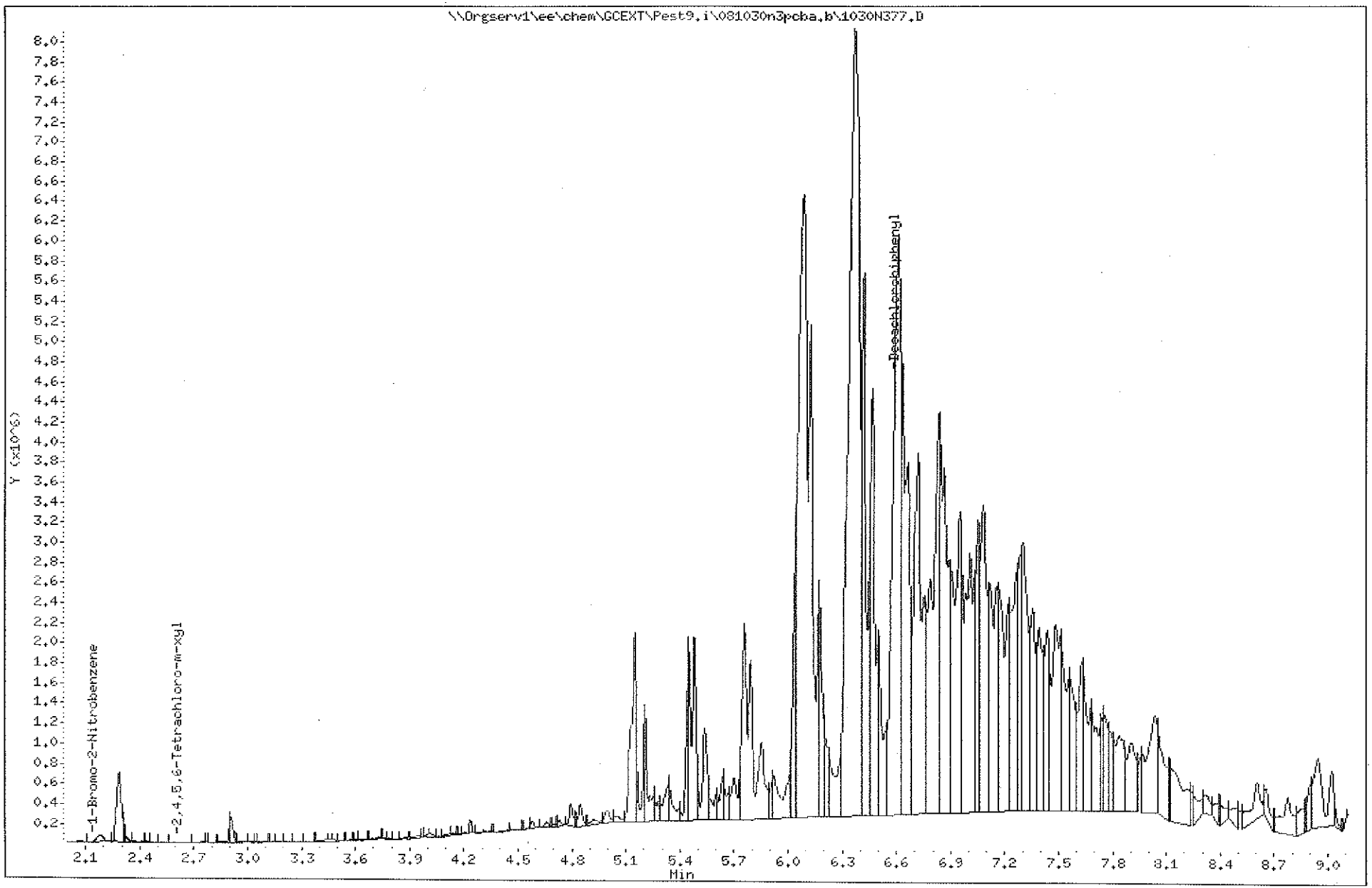
Data File: \\Orgserv1\ee\chem\GCEXT\Pest9,i\081030n3pcbb,b\1030N376,D
Date : 31-OCT-2008 07:06
Client ID:
Sample Info: 10815829-02,4, fv4

Instrument: Pest9,i
Operator: sh
Column phase: Rtx-5
Column diameter: 0.32



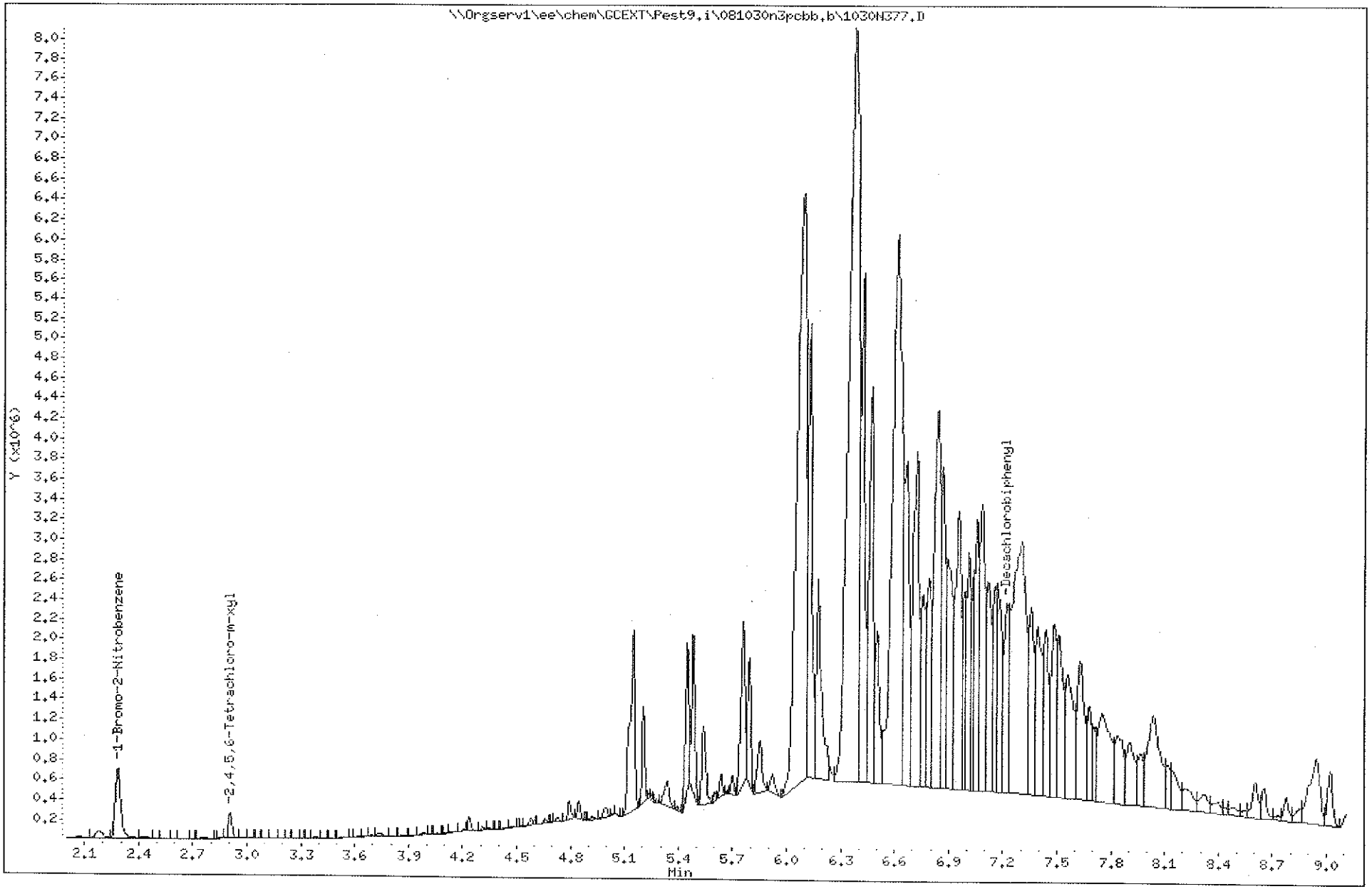
Data File: \\Orgserv1\ee\chem\GCEXT\Pest9.i\081030n3pcba.b\1030N377.D
Date : 31-OCT-2008 07:18
Client ID:
Sample Info: 10815829-03,4, fv4

Instrument: Pest9.i
Operator: sh
Column phase: Rtx-1701
Column diameter: 0.32



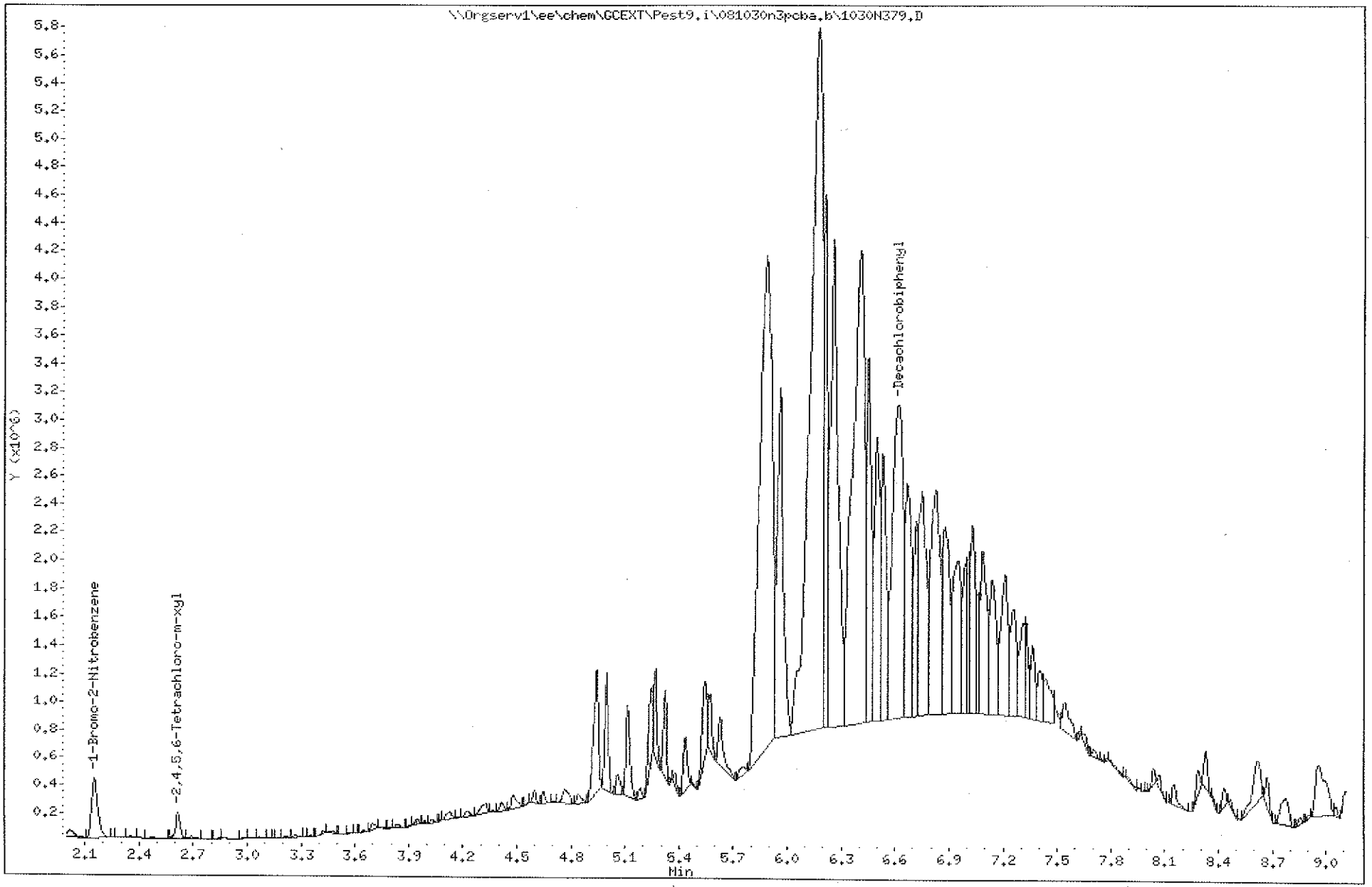
Data File: \\Orgserv1\ee\chem\GCEXT\Pest9,i\081030n3pcbb,b\1030N377.D
Date : 31-OCT-2008 07:18
Client ID:
Sample Info: 10815829-03,4, fv4

Instrument: Pest9,i
Operator: sh
Column phase: Rtx-5
Column diameter: 0.32



Data File: \\Orgserv1\ee\chem\GCEXT\Pest9.i\081030n3pcba.b\1030N379.D
Date : 31-OCT-2008 07:42
Client ID:
Sample Info: 10815829-04,4, fv4

Instrument: Pest9.i
Operator: sh
Column phase: Rtx-1701
Column diameter: 0.32



Data File: \\Orgserv1\ee\chem\GCEXT\Pest9,i\081030n3pcbb,b\1030N379,D

Date : 31-OCT-2008 07:42

Client ID:

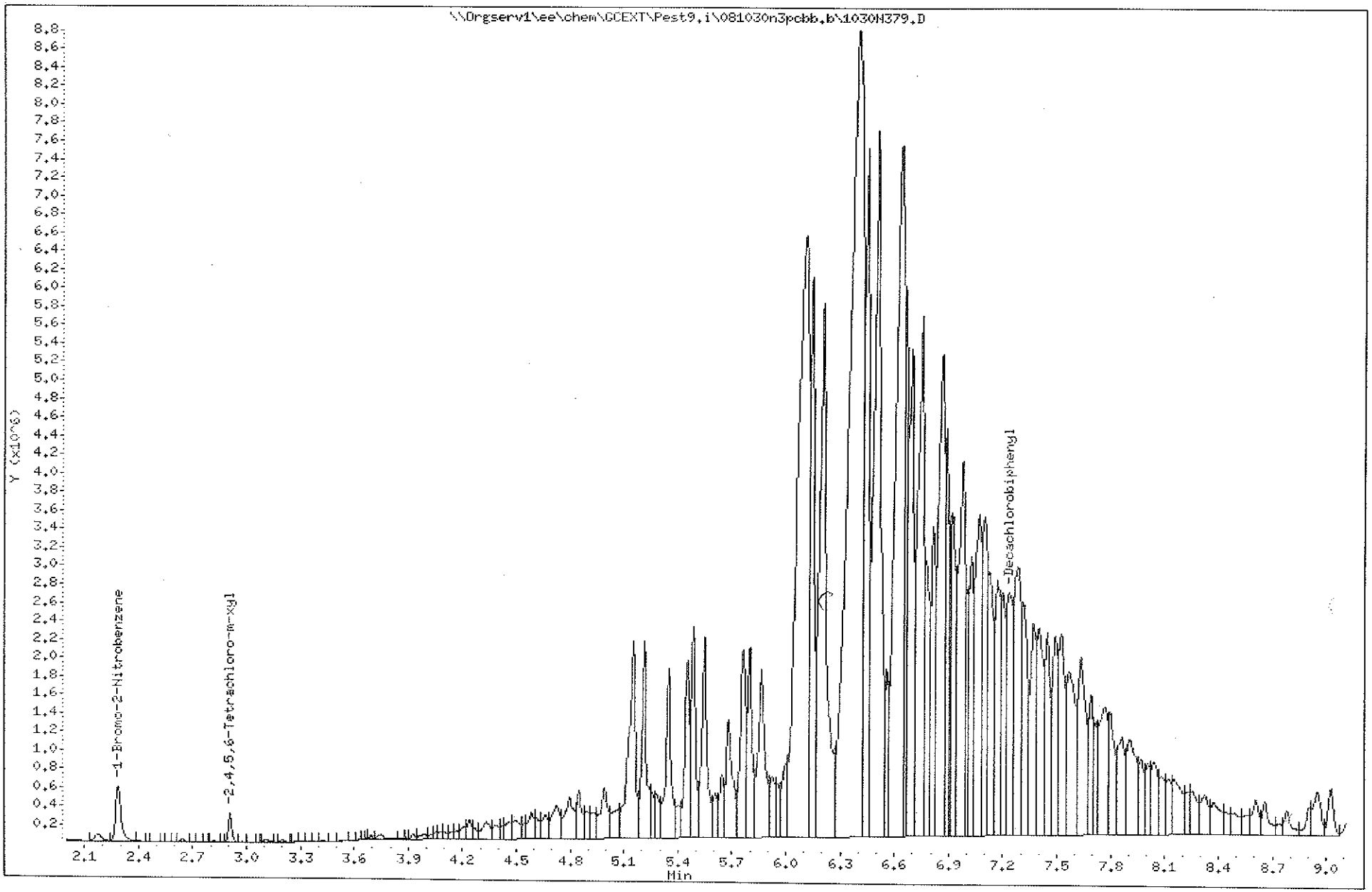
Instrument: Pest9,i

Sample Info: 10815829-04,4, fv4

Operator: sh

Column phase: Rtx-5

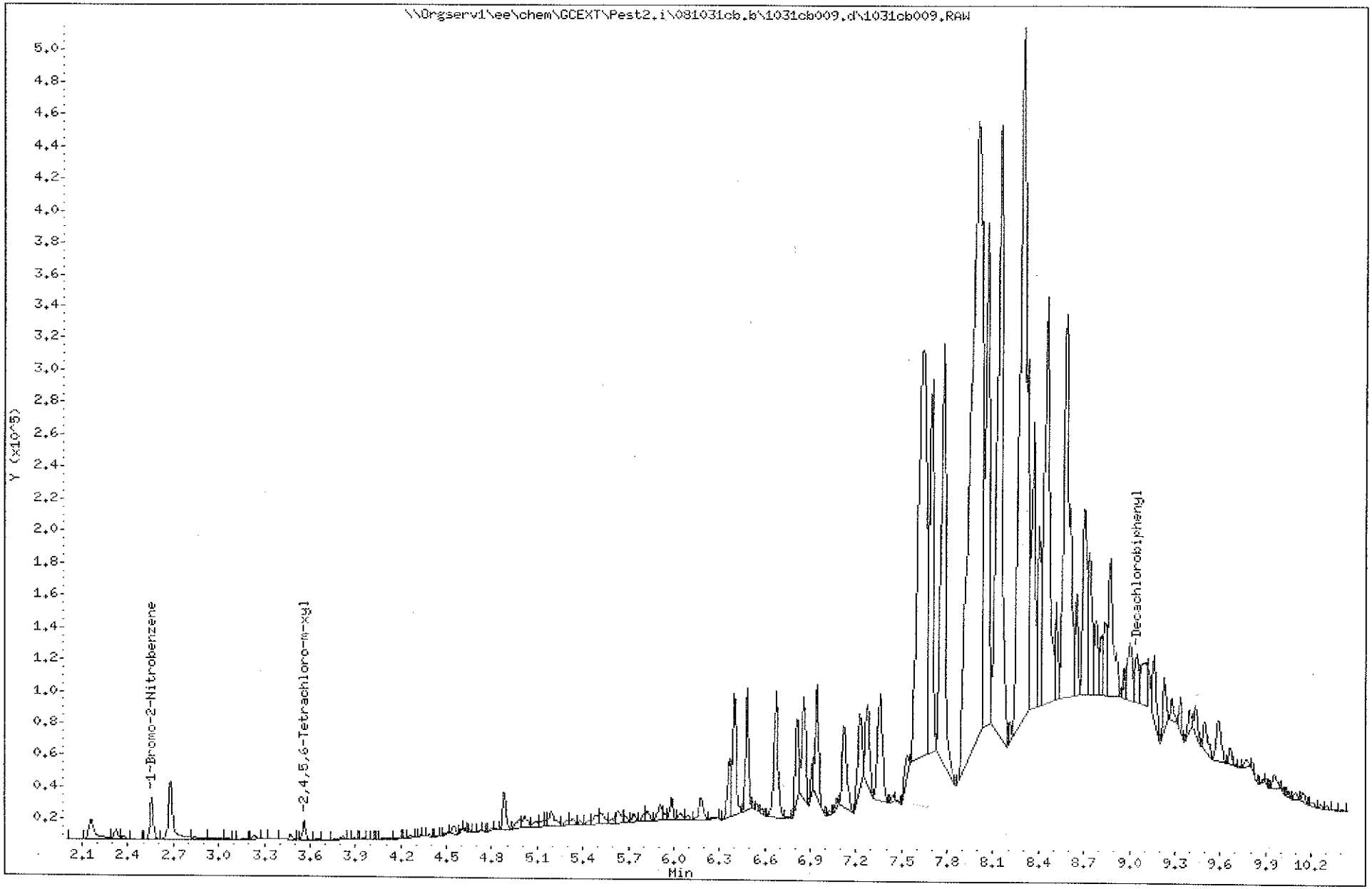
Column diameter: 0,32



Data File: \\Orgserv1\ee\chem\GCEXT\Pest2.i\081031cb.b\1031cb009.d
Date : 31-OCT-2008 10:26
Client ID:
Sample Info: 10815829-05.4, fv4 rr

Instrument: pest2.i
Operator: sh
Column diameter: 0.32

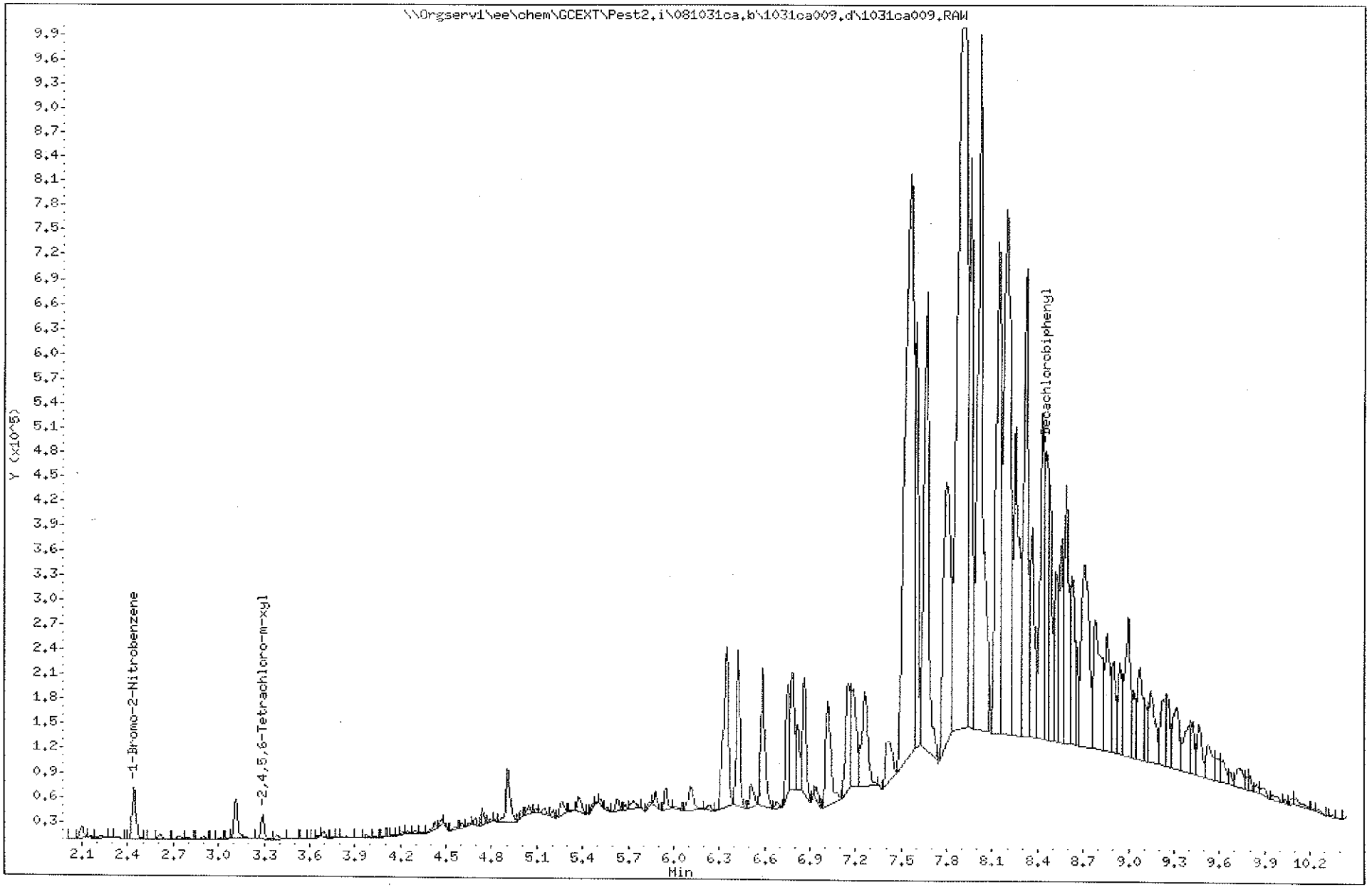
Column phase: Rtx-5



Data File: \\Orgserv1\ee\chem\GCEXT\Pest2.i\081031ca.b\1031oa009.d
Date : 31-OCT-2008 10:26
Client ID:
Sample Info: 10815829-05,4, fv4 rr

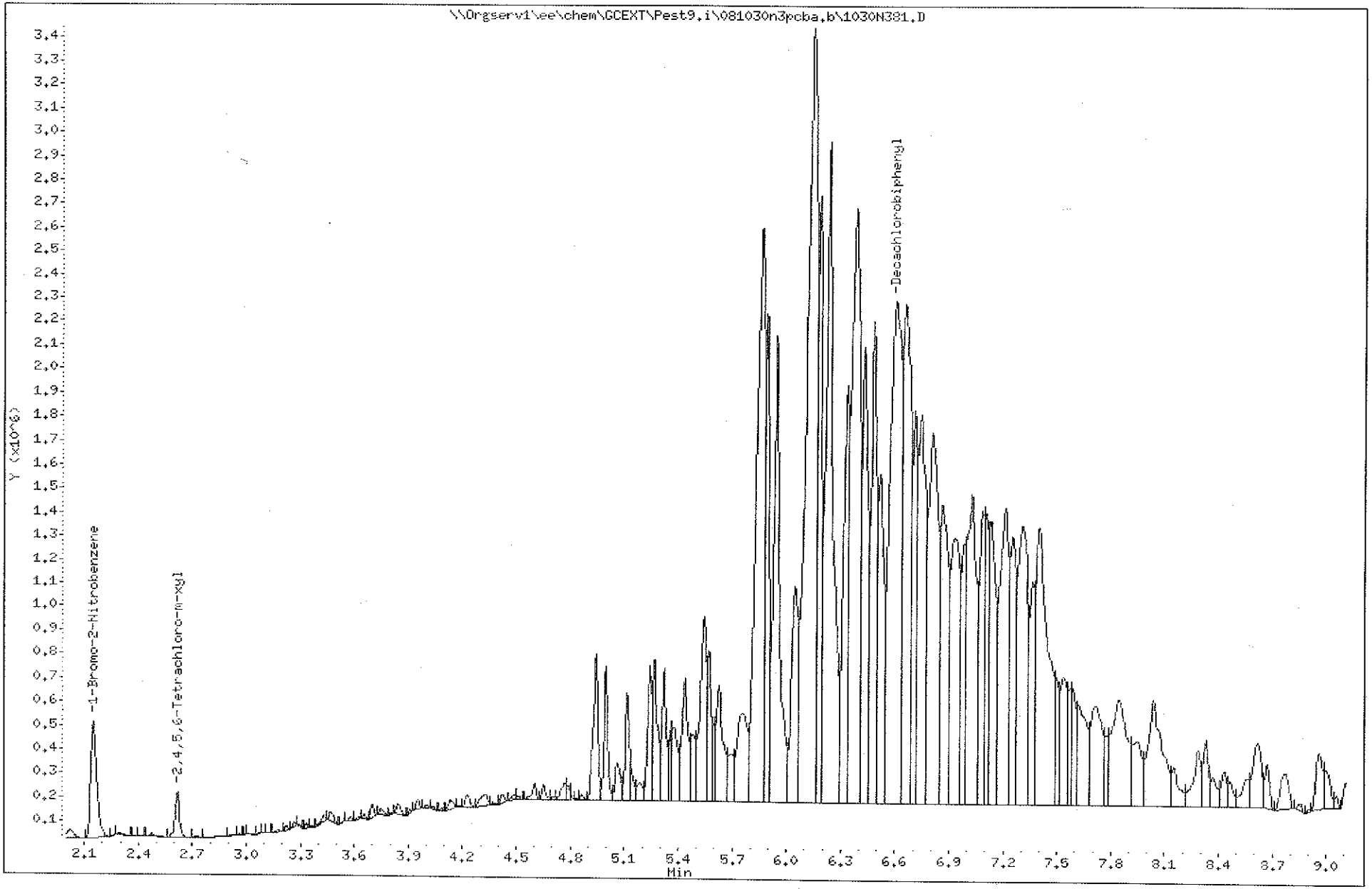
Instrument: pest2.i
Operator: sh
Column diameter: 0.32

Column phase: Rtx-1701



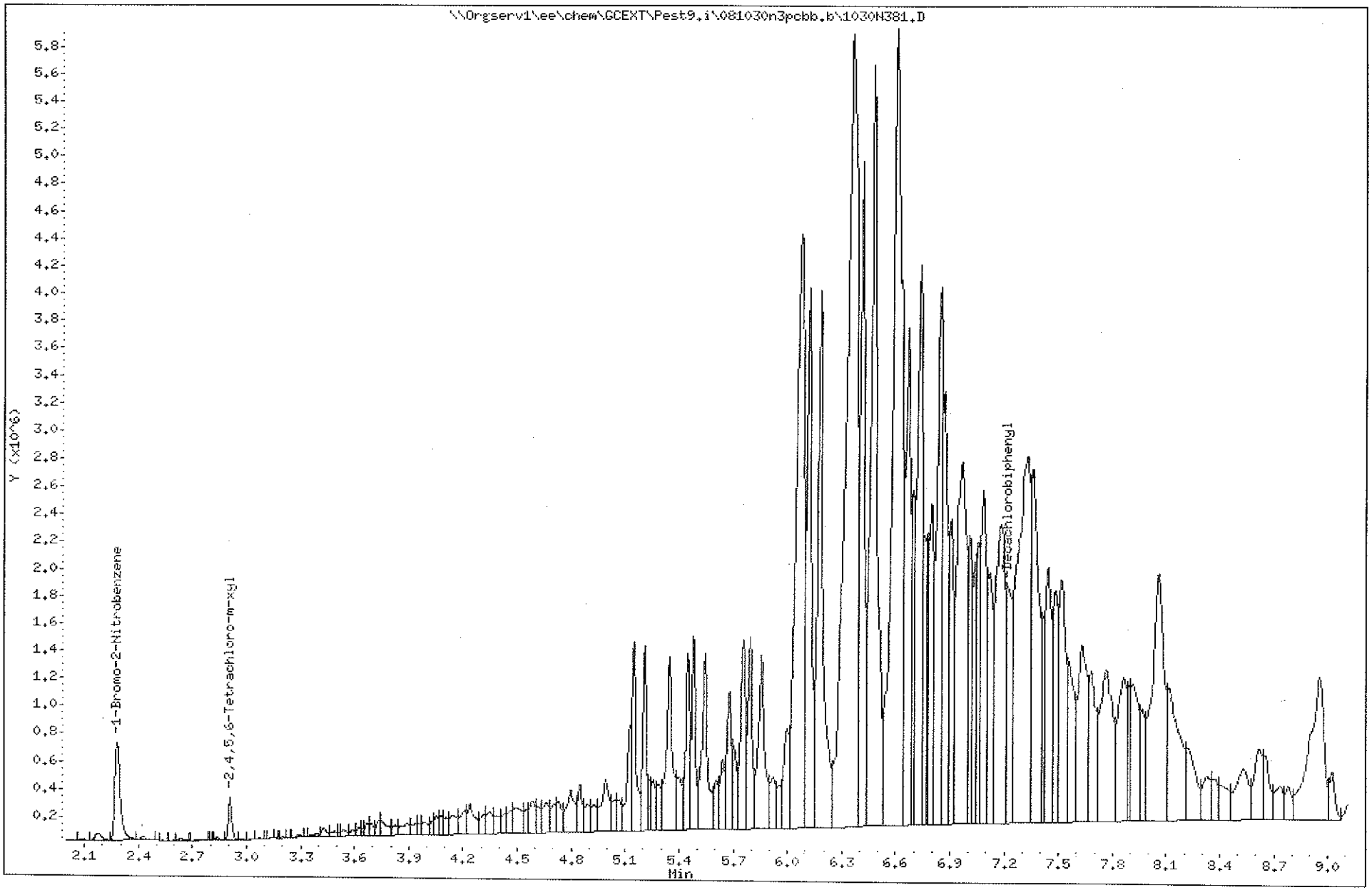
Data File: \\Orgserv1\ee\chem\GCEXT\Pest9,i\081030n3pcba,b\1030N381.D
Date : 31-OCT-2008 08:09
Client ID:
Sample Info: 10815829-06,4, fv4

Instrument: Pest9.i
Operator: sh
Column phase: Rtx-1701
Column diameter: 0.32



Data File: \\Orgserv1\ee\chem\GCEXT\Pest9.i\081030n3pcbb.b\1030N381.D
Date : 31-OCT-2008 08:09
Client ID:
Sample Info: 10815829-06,4, fv4

Instrument: Pest9.i
Operator: sh
Column phase: Rtx-5
Column diameter: 0.32



ProScience Analytical Services, Inc.

PLM Asbestos Chain of Custody Record

LABORATORY/HEADQUARTERS
22 Cummings Park, Woburn, MA 01801
T:781-935-3212 F:781-932-4857

LABORATORY SERVICES
683 North Mountain Rd., Newington, CT 06111
T:860-953-1022 F:860-953-1030

☐ RUSH

Turn Around Time Requested

☐ Same day ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☒ 5 Days

Client: GZA
Address: 1 Edgewater Dr., Norwood, MA 02062
Project Site & Number: 19395.20 Ne Paog Dam
Phone / FAX Number: 781-278-3700 / 781-278-5701
Contact: Dale Leone
For Lab Use> Batch Number B

Relinquished by/date:
Received by/date:
Samples received: Analyzed:
Faxed, E-mailed, Verbal by/date:
Stop on first positive: Yes No

Analyzed by/date: [signature] 11/3/08
QC by/date: AS 11/03/08

Lab ID	Field ID Sampled date	Description / Location	% Asbestos	Color	Homogeneity	Texture	Friable	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI ∥	RI ⊥	Chrysotile	Amosite	Crocidolite	Tremolite	Anthophylite	Actinolite	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
	S-1		0	GW		R	SW																				100
	S2		0																								100
	S3		0																								100
	S4		0																								100
	S5		0																								100
	S6		0																								100

Comments:

For complete information about our services and locations please visit us at www.proscience.net or call the numbers above.

Revised on 7/20/07

ProScience Analytical Services, Inc.

PLM Asbestos Chain of Custody Record

LABORATORY/HEADQUARTERS
22 Cummings Park, Woburn, MA 01801
T:781-935-3212 F:781-932-4857

LABORATORY SERVICES
683 North Mountain Rd., Newington, CT 06111
T:860-953-1022 F:860-953-1030

☐ RUSH

Turn Around Time Requested

☐ Same day ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 5 Days

Client: GZA
Address: 1 Edgewater Dr., Norwood, MA 02062
Project Site & Number: 19395.20 NePaog Dam
Phone / FAX Number: 781-278-3700 / 781-278-5701
Contact: Dale Leone
For Lab Use> Batch Number B

Relinquished by/date:
Received by/date:
Samples received: Analyzed:
Faxed, E-mailed, Verbal by/date: SB
Stop on first positive: Yes No

Analyzed by/date: SB 4-3-08
QC by/date: AP

Lab ID	Field ID Sampled date	Description / Location	Stereo Scope: % Asbestos	Color	Homogeneity	Texture	Friable	Optical Properties: Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI: ‖	⊥	Asbestos Percentage (%): Chrysotile	Amosite	Crocidolite (Circle Type)	Tremolite	Anthophylite	Actinolite	Non Asbestos Percentage (%): Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fibrous
	57		[illegible]	[illegible]	[illegible]	[illegible]																					100
	58		[illegible]	[illegible]	[illegible]	[illegible]																					100

Comments:

For complete information about our services and locations please visit us at www.proscience.net or call the numbers above.

Revised on 7/20/07

GZA Geoenvironmental, Inc.
One Edgewater Drive, Norwood, MA 02062
Phone (781) 278-3700 Fax (781) 278-5701

CHAIN OF CUSTODY DOCUMENT

Page 1 of 1

Client Name:	GZA GeoEnvironmental	Project Location	P.O. No.:	Laboratory
Project Name:	Nepaug Dam	Nepaug Dam	Sample Date: 10/23/08	ProScience
Project No.:	19395.20	Collinsville, CT	Date Shipped: 10/24/08	22 Cummings Park
Send Results To:	Dave E. Leone		Cooler No.:	Woburn, MA 01801
GZA Field Team:	Laurie Miller		COC Seal No.:	Attn: Asbestos Lab
Turnaround Time (Please Circle): 6 Hr 24 Hr 48 Hr 72 Hr (5-Day) Other _____			Analysis Requested: (PLM)	Tel.#: 781-935-3212

Item	Sample #	Sample Description	Sample Location	Special Instructions
1	S-1	CAULK	BETWEEN 9 + 11	If trace amounts appear, conduct TEM
2	S-2	CAULK	BETWEEN 9 + 7	
3	S-3	CAULK	BETWEEN 10 + 8	
4	S-4	CAULK	BETWEEN 5 + 3	
5	S-5	CAULK	BETWEEN 6 + 8	
6	S-6	CAULK	RIGHT GIT CORNER	
7	S-7	CAULK	BRIDGE DECK	
8	S-8	"	D/S RIGHT SPLAY ABUT	
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Field Notes and Misc. Comments:

Sign & date C-O-C form and return original copy with final data report, keep a copy for your records.

Please stop on 1st positive within homogeneous groups.

Relinquished by (Print Name): Laurie G. Miller Signature:	Date: 10/24/08 Time: 3:10	Received by: Laurie Cochran	Date: 10/27/08 Time: 1:20pm	Analytical Laboratory Notes:
Relinquished by:	Date: Time:	Received by Lab (Print Name): Signature:	Date: Time:	

J:\P151-000\P151-000.9\COC-Master.xls

ANALYTICAL REPORT

Lab Number:	L0816543
Client:	GZA GeoEnvironmental, Inc. 106 South Street Hopkinton, MA 01748
ATTN:	Sampling & Receiving
Project Name:	NEPAUG
Project Number:	19395.2
Report Date:	11/12/08

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: NEPAUG
Project Number: 19395.2

Lab Number: L0816543
Report Date: 11/12/08

Alpha Sample ID	Client ID	Sample Location
L0816543-01	PCB1-BETWEEN 9811	COLLINSVILLE, CT

Project Name: NEPAUG
Project Number: 19395.2

Lab Number: L0816543
Report Date: 11/12/08

CT DEP Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents)?	YES
1a	Were the method specified preservation and holding time requirements met?	NO
1b	VPH & EPH Methods Only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4°C ± 2°)?	YES
4	Were all QA/QC performance criteria specified in the CT DEP Reasonable Confidence Protocol documents achieved?	YES
5a	Were reporting limits specified or referenced on the chain-of-custody?	YES
5b	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	YES
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	NO

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or question B is "No", the data package does not meet the requirements for "Reasonable Confidence".

Project Name:	NEPAUG	**Lab Number:**	L0816543
Project Number:	19395.2	**Report Date:**	11/12/08

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

RCP Related Narratives

Sample Receipt

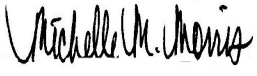
In reference to question 1A:

The analysis of PCB was received with the method required holding time exceeded and was performed at the client's request.

PCB

L0816543-01 and the associated QC have elevated detection limits due to the limited sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: 

Title: Technical Director/Representative Date: 11/12/08

ORGANICS

PCBS

Project Name: NEPAUG **Lab Number:** L0816543

Project Number: 19395.2 **Report Date:** 11/12/08

SAMPLE RESULTS

Lab ID:	L0816543-01	Date Collected:	10/23/08 10:30
Client ID:	PCB1-BETWEEN 9811	Date Received:	11/07/08
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	77,8082	Extraction Date:	11/07/08 23:00
Analytical Date:	11/08/08 13:51	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	11/08/08
Percent Solids:	Results are reported on an 'AS RECEIVED' basis.		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Polychlorinated Biphenyls by CT RCP 8082					
Aroclor 1260	138000		ug/kg	12500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	131		30-150	A
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	95		30-150	B

Project Name: NEPAUG **Lab Number:** L0816543

Project Number: 19395.2 **Report Date:** 11/12/08

SAMPLE RESULTS

Lab ID:	L0816543-01	Date Collected:	10/23/08 10:30
Client ID:	PCB1-BETWEEN 9811	Date Received:	11/07/08
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	77,8082	Extraction Date:	11/07/08 23:00
Analytical Date:	11/08/08 13:51	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	11/08/08
Percent Solids:	Results are reported on an 'AS RECEIVED' basis.		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Polychlorinated Biphenyls by CT RCP 8082					
Aroclor 1016	ND		ug/kg	12500	1
Aroclor 1221	ND		ug/kg	12500	1
Aroclor 1232	ND		ug/kg	12500	1
Aroclor 1242	ND		ug/kg	12500	1
Aroclor 1248	ND		ug/kg	12500	1
Aroclor 1254	ND		ug/kg	12500	1
Aroclor 1262	ND		ug/kg	12500	1
Aroclor 1268	ND		ug/kg	12500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	131		30-150	A
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	95		30-150	B

Project Name: NEPAUG
Project Number: 19395.2

Lab Number: L0816543
Report Date: 11/12/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 77,8082
Analytical Date: 11/08/08 13:13
Analyst: SH

Extraction Method: EPA 3580A
Extraction Date: 11/07/08 23:00
Cleanup Method1: EPA 3665A
Cleanup Date1: 11/08/08

Parameter	Result	Qualifier	Units	RDL
Polychlorinated Biphenyls by CT RCP 8082 for sample(s): 01 Batch: WG343066-1				
Aroclor 1016	ND		ug/kg	5000
Aroclor 1221	ND		ug/kg	5000
Aroclor 1232	ND		ug/kg	5000
Aroclor 1242	ND		ug/kg	5000
Aroclor 1248	ND		ug/kg	5000
Aroclor 1254	ND		ug/kg	5000
Aroclor 1260	ND		ug/kg	5000
Aroclor 1262	ND		ug/kg	5000
Aroclor 1268	ND		ug/kg	5000

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	83		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEPAUG
Project Number: 19395.2

Lab Number: L0816543
Report Date: 11/12/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Polychlorinated Biphenyls by CT RCP 8082 Associated sample(s): 01 Batch: WG343066-2 WG343066-3					
Aroclor 1016	89	80	40-140	11	30
Aroclor 1260	93	88	40-140	6	30

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		88		30-150	A
Decachlorobiphenyl	80		77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		93		30-150	B
Decachlorobiphenyl	79		78		30-150	B

Project Name: NEPAUG
Project Number: 19395.2

Lab Number: L0816543
Report Date: 11/12/08

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0816543-01A	Glass 250ml unpreserved	A	N/A	2.9 c	Y	Absent	CT-8082(14),TS100()

*Hold days indicated by values in parentheses

Project Name:	NEPAUG	**Lab Number:**	L0816543
Project Number:	19395.2	**Report Date:**	11/12/08

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NI - Not Ignitable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Standard Qualifiers

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

Report Format: Not Specified

Project Name:	NEPAUG	**Lab Number:**	L0816543
Project Number:	19395.2	**Report Date:**	11/12/08

REFERENCES

77 Connecticut DEP Quality Assurance and Quality Control Requirements for SW-846 Methods. CTDEP Reasonable Confidence Protocols (RCPs). Version 1.0, July 2005.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Woods Hole Labs.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

11120811:06

CHAIN OF CUSTODY

PAGE_____ OF_____

Date Rec'd in Lab: 11/7

ALPHA Job #: L0816543

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: GZA GeoEnvironmental
Address: One Edgewater Dr. Norwood, MA 02062
Phone: 781 278 5848
Fax: 781 278 5701
Email: de.leone@gza.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Nepaug
Project Location: Collinsville, CT
Project #: 19395.2
Project Manager: D.E. Leone
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 11/12 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO-

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
Manual Soxhlet Extraction
3540C

ANALYSIS: PCB-Manual Soxhlet

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials		Sample Specific Comments
16543-1	PCB1-Between 9&11	10/23/08	10 30	Caulk	LG+M	X	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type: Glass
Preservative: None

Relinquished By:	Date/Time	Received By:	Date/Time
Laurie C. Mogan	11/7/08 1305		11/7/08 1505
	11/7/08 1815		11/7 1815

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

August 27, 2009

FOR: Attn: Ms Amy Velasquez
The Metropolitan District-EHSD
555 Main St PO Box 800
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	MN	08/21/09	10:30
Location Code:	MDC-WPCF	Received by:	SW	08/21/09	16:05
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	404650				

Laboratory Data

SDG ID: GAS15939
Phoenix ID: AS15939

Project ID: NEPAUG DAM
Client ID: 082109 CAULK 9-11

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	08/24/09		M-JL	E160.3
Caulk Extraction for PCB	Completed			08/21/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1221	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1232	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1242	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1248	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1254	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1260	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1262	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1268	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	102		%	08/25/09		MH	3540C/8082
% TCMX	100		%	08/25/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
August 27, 2009

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Analysis Report

August 27, 2009

FOR: Attn: Ms Amy Velasquez
The Metropolitan District-EHSD
555 Main St PO Box 800
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	MN	08/21/09	10:40
Location Code:	MDC-WPCF	Received by:	SW	08/21/09	16:05
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	404650				

Laboratory Data

SDG ID: GAS15939
Phoenix ID: AS15940

Project ID: NEPAUG DAM
Client ID: 082109 FOAM 9-11

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	08/24/09		M-JL	E160.3
Extraction for PCB	Completed			08/21/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	5500	ug/Kg	08/25/09		MH	3540C/8082
PCB-1221	ND	5500	ug/Kg	08/25/09		MH	3540C/8082
PCB-1232	ND	5500	ug/Kg	08/25/09		MH	3540C/8082
PCB-1242	ND	5500	ug/Kg	08/25/09		MH	3540C/8082
PCB-1248	ND	5500	ug/Kg	08/25/09		MH	3540C/8082
PCB-1254	ND	5500	ug/Kg	08/25/09		MH	3540C/8082
PCB-1260	ND	5500	ug/Kg	08/25/09		MH	3540C/8082
PCB-1262	ND	5500	ug/Kg	08/25/09		MH	3540C/8082
PCB-1268	ND	5500	ug/Kg	08/25/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	87		%	08/25/09		MH	3540C/8082
% TCMX	91		%	08/25/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller

Phyllis Shiller, Laboratory Director
August 27, 2009

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Analysis Report

August 27, 2009

FOR: Attn: Ms Amy Velasquez
The Metropolitan District-EHSD
555 Main St PO Box 800
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	MN	08/21/09	10:40
Location Code:	MDC-WPCF	Received by:	SW	08/21/09	16:05
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	404650				

Laboratory Data

SDG ID: GAS15939
Phoenix ID: AS15941

Project ID: NEPAUG DAM
Client ID: 082109 TAR 9-11

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	08/24/09		M-JL	E160.3
Extraction for PCB	Completed			08/21/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	15000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1221	ND	15000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1232	ND	15000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1242	ND	15000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1248	ND	15000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1254	ND	15000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1260	ND	15000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1262	ND	15000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1268	ND	15000	ug/Kg	08/25/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	85		%	08/25/09		MH	3540C/8082
% TCMX	88		%	08/25/09		MH	3540C/8082

Comments:

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ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller

Phyllis Shiller, Laboratory Director
August 27, 2009

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Analysis Report

August 27, 2009

FOR: Attn: Ms Amy Velasquez
The Metropolitan District-EHSD
555 Main St PO Box 800
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	MN	08/21/09	10:30
Location Code:	MDC-WPCF	Received by:	SW	08/21/09	16:05
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	404650				

Laboratory Data

SDG ID: GAS15939
Phoenix ID: AS15942

Project ID: NEPAUG DAM
Client ID: 082109 CONCRETE 9-11

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	08/24/09		M-JL	E160.3
Extraction for PCB	Completed			08/21/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	950	ug/Kg	08/25/09		MH	3540C/8082
PCB-1221	ND	950	ug/Kg	08/25/09		MH	3540C/8082
PCB-1232	ND	950	ug/Kg	08/25/09		MH	3540C/8082
PCB-1242	ND	950	ug/Kg	08/25/09		MH	3540C/8082
PCB-1248	ND	950	ug/Kg	08/25/09		MH	3540C/8082
PCB-1254	ND	950	ug/Kg	08/25/09		MH	3540C/8082
PCB-1260	ND	950	ug/Kg	08/25/09		MH	3540C/8082
PCB-1262	ND	950	ug/Kg	08/25/09		MH	3540C/8082
PCB-1268	ND	950	ug/Kg	08/25/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	80		%	08/25/09		MH	3540C/8082
% TCMX	84		%	08/25/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
August 27, 2009

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Analysis Report

August 27, 2009

FOR: Attn: Ms Amy Velasquez
The Metropolitan District-EHSD
555 Main St PO Box 800
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	MN	08/21/09	11:00
Location Code:	MDC-WPCF	Received by:	SW	08/21/09	16:05
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	404650				

Laboratory Data

SDG ID: GAS15939
Phoenix ID: AS15943

Project ID: NEPAUG DAM
Client ID: 082109 CAULK 7-9

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	08/24/09		M-JL	E160.3
Caulk Extraction for PCB	Completed			08/21/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1221	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1232	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1242	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1248	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1254	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1260	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1262	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1268	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	97		%	08/25/09		MH	3540C/8082
% TCMX	64		%	08/25/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
August 27, 2009

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Analysis Report

August 27, 2009

FOR: Attn: Ms Amy Velasquez
The Metropolitan District-EHSD
555 Main St PO Box 800
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	MN	08/21/09	11:10
Location Code:	MDC-WPCF	Received by:	SW	08/21/09	16:05
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	404650				

Laboratory Data

SDG ID: GAS15939
Phoenix ID: AS15944

Project ID: NEPAUG DAM
Client ID: 082109 CAULK 5-7

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	08/24/09		M-JL	E160.3
Caulk Extraction for PCB	Completed			08/21/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1221	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1232	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1242	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1248	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1254	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1260	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1262	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
PCB-1268	ND	1700	ug/Kg	08/25/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	106		%	08/25/09		MH	3540C/8082
% TCMX	94		%	08/25/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller

Phyllis Shiller, Laboratory Director
August 27, 2009

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Analysis Report

August 27, 2009

FOR: Attn: Ms Amy Velasquez
The Metropolitan District-EHSD
555 Main St PO Box 800
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	MN	08/21/09	11:20
Location Code:	MDC-WPCF	Received by:	SW	08/21/09	16:05
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	404650				

Laboratory Data

SDG ID: GAS15939
Phoenix ID: AS15945

Project ID: NEPAUG DAM
Client ID: 082109 CAULK 8-10

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	08/24/09		M-JL	E160.3
Caulk Extraction for PCB	Completed			08/21/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	1700	ug/Kg	08/24/09		MH	3540C/8082
PCB-1221	ND	1700	ug/Kg	08/24/09		MH	3540C/8082
PCB-1232	ND	1700	ug/Kg	08/24/09		MH	3540C/8082
PCB-1242	ND	1700	ug/Kg	08/24/09		MH	3540C/8082
PCB-1248	ND	1700	ug/Kg	08/24/09		MH	3540C/8082
PCB-1254	ND	1700	ug/Kg	08/24/09		MH	3540C/8082
PCB-1260	ND	1700	ug/Kg	08/24/09		MH	3540C/8082
PCB-1262	ND	1700	ug/Kg	08/24/09		MH	3540C/8082
PCB-1268	ND	1700	ug/Kg	08/24/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	83		%	08/24/09		MH	3540C/8082
% TCMX	94		%	08/24/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
August 27, 2009

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Analysis Report

August 27, 2009

FOR: Attn: Ms Amy Velasquez
The Metropolitan District-EHSD
555 Main St PO Box 800
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	MN	08/21/09	11:30
Location Code:	MDC-WPCF	Received by:	SW	08/21/09	16:05
Rush Request:		Analyzed by:	see "By" below		
P.O.#:	404650				

Laboratory Data

SDG ID: GAS15939
Phoenix ID: AS15946

Project ID: NEPAUG DAM
Client ID: 082109 CAULK 4-6

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	08/24/09		M-JL	E160.3
Caulk Extraction for PCB	Completed			08/21/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	17000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1221	ND	17000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1232	ND	17000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1242	ND	17000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1248	ND	17000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1254	ND	17000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1260	66000	17000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1262	ND	17000	ug/Kg	08/25/09		MH	3540C/8082
PCB-1268	ND	17000	ug/Kg	08/25/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	08/25/09		MH	3540C/8082
% TCMX	Diluted Out		%	08/25/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller

Phyllis Shiller, Laboratory Director
August 27, 2009

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

August 27, 2009

QA/QC Data

SDG I.D.: GAS15939

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 134243, QC Sample No: AS15823 (AS15943, AS15944, AS15945, AS15946)							
Polychlorinated Biphenyls							
PCB-1016	ND	110	114	3.6	98	91	7.4
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	96	93	3.2	*	*	NC
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	82	69	69	0.0	57	61	6.8
% TCMX (Surrogate Rec)	77	63	69	9.1	61	65	6.3

Comment:

* The batch MS and MSD recoveries could not be calculated due to the presence of PCB in the unspiked sample. LCS/LCSD recoveries were within QA/QC limits.

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 134247, QC Sample No: AS15957 (AS15939, AS15940, AS15941, AS15942)							
Polychlorinated Biphenyls							
PCB-1016	ND	87	89	2.3	95	100	5.1
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	94	96	2.1	103	102	1.0
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	80	69	66	4.4	76	79	3.9
% TCMX (Surrogate Rec)	80	45	45	0.0	51	52	1.9

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
August 27, 2009

Reasonable Confidence Protocol
Laboratory Analysis QA/QC Certification Form

Laboratory Name: Phoenix Environmental Labs, Inc. **Client:** MDC-WPCF

Project Location: NEPAUG DAM **Project Number:**

Laboratory Sample ID(s): AS15939, AS15940, AS15941, AS15942, AS15943, AS15944, AS15945, AS15946

Sampling Date(s): 8/21/2009

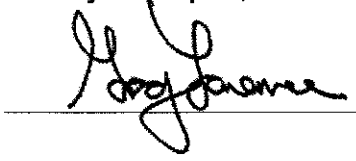
RCP Methods Used:

☐ 1311/1312	☐ 6010	☐ 7000	☐ 7196	☐ 7470/7471	☐ 8081	☐ EPH
☑ 8082	☐ 8151	☐ 8260	☐ 8270	☐ ETPH	☐ 9010/9012	☐ VPH

1.	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence	☑ Yes ☐ No
1a.	Were the method specified preservation and holding time requirements met?	☑ Yes ☐ No
1b.	EPH and VPH methods only: Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☑ NA
2.	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☑ Yes ☐ No
3.	Were samples received at an appropriate temperature (< 6 Degrees C)?	☐ Yes ☑ No ☐ NA
4.	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents acheived?	☑ Yes ☐ No
5a.	Were reporting limits specified or referenced on the chain-of-custody?	☐ Yes ☑ No
5b.	Were these reporting limits met?	☐ Yes ☐ No ☑ NA
6.	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☑ Yes ☐ No ☐ NA
7.	Are project-specific QC samples included in the data set?	☐ Yes ☐ No ☑ NA

Note: For all questions to which the response was "No" (with the exception of question #5a, #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence"

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowlegde and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: 

Date: Thursday, August 27, 2009

Printed Name: Greg Lawrence

Position: Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

RCP Certification Report

August 27, 2009

SDG I.D.: GAS15939

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument: Au-ecd1 08/25/09-1 (AS15939, AS15943, AS15944, AS15946)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 8/25/2009

Instrument: Au-ecd7 08/24/09-1 (AS15945)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 8/24/2009

Instrument: Au-ecd8 08/24/09-1 (AS15940, AS15941, AS15942)

8082 Narration:

The initial calibration RSD for the compound list was less than 15% except for the following compounds: none

The continuing calibration standards were within acceptance criteria except for the following compounds: none

Printed Name Michael Hahn
Position: Chemist
Date: 8/24/2009

QC Comments: QC Batch 34243 08/21/09 (AS15943, AS15944, AS15945, AS15946)

The batch MS and MSD recoveries could not be calculated due to the presence of PCB in the unspiked sample. LCS/LCSD recoveries were v
QA/QC limits.

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: service@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 10°C Page 1 of 1

Data Delivery:
- ☐ Fax #: _____
- ☒ Email: avelasquez@themdc.com

Customer: MDC
Address: 555 Main St., P.O. Box 800
Hartford, CT 06142-0800

Project: Nepaug Dam
Report to: Amy Velasquez
Invoice to: Amy Velasquez

Project P.O: _____
Phone #: (860) 278-7850 ext. 3454
Fax #: (860) 251-6141

Client Sample - Information - Identification

Sampler's Signature: Marc Nettleton 8/21/09 Date

Matrix Code:
DW=drinking water WW=wastewater S=soil/solid O=other
GW=groundwater SL=sludge A=air

Analysis Request

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	PCB soxhlet extraction & clean up	Soil VOA [ ] Methanol [ ] S. Bisulfate [ ] H20	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
15939	082109 Caulk 9-11	S	8/21/09	1030	✓						✓				
15940 15941 *	082109 Foam & Tar 9-11	S	8/21/09	1040	✓						✓				
15942	082109 Concrete 9-11	S	8/21/09	1050	✓						✓				
15943	082109 Caulk 7-9	S	8/21/09	1100	✓						✓				
15944	082109 Caulk 5-7	S	8/21/09	1110	✓						✓				
15945	082109 Caulk 8-10	S	8/21/09	1120	✓						✓				
15946	082109 Caulk 4-6	S	8/21/09	1130	✓						✓				

Relinquished by:	Accepted by:	Date:	Time:
Marc Nettleton	Jacqueline D-Cabral	8/21/09	3:30pm
Jacqueline D Cabral	Lori Blaylo	8/21/09	4:05pm

Comments, Special Requirements or Regulations:
- Greg Lawrence has additional info about these samples.
- * Sample is foam w/tar on it. Separate tar from foam & run PCB on both if possible.
- White caulk only for caulk samples

Turnaround:
- ☐ 1 Day*
- ☐ 2 Days*
- ☐ 3 Days*
- ☒ Standard
- ☐ Other

* SURCHARGE APPLIES

CT/RI
- ☐ RCP Cert.
- ☐ GW Protect.
- ☐ GA Mobility
- ☐ GB Mobility
- ☐ SW Protect.
- ☐ Res. Vol.
- ☐ Ind. Vol.
- ☐ Res. Criteria
- ☐ Other

MA
- ☐ MCP Cert.
- ☐ GW-1
- ☐ GW-2
- ☐ GW-3
- ☐ S-1
- ☐ S-2
- ☐ S-3
- ☐ MWRA eSMART
- ☐ Other

Data Format
- ☐ Excel
- ☒ PDF
- ☐ GIS/Key
- ☐ EQuIS
- ☐ Other _____

Data Package
- ☐ ASP-A
- ☐ NJ Reduced Deliv. *
- ☐ NJ Hazsite EDD
- ☐ Phoenix Std Report
- ☐ Other

State where samples were collected: CT

209-5487 mark-

PHOENIX
Environmental Laboratories, Inc.

Monday, September 14, 2009

Attn: Mr. Marc Nettleton
The Metropolitan District
555 Main Street
Hartford, CT 06142

Project ID: NEPAUG DAM
Sample ID#s: AS23551 - AS23555

This laboratory is in compliance with the QA/QC procedures outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, SW846 QA/QC and NELAC requirements of procedures used.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
TX Lab Registration #T104704451-09TX
VT Lab Registration #VT11301

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Report

September 15, 2009

FOR: Attn: Mr. Marc Nettleton
The Metropolitan District
555 Main Street
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	DRINKING WATER	Collected by:		09/11/09	10:58
Location Code:	MDC-WPCF	Received by:	SW	09/11/09	17:04
Rush Request:	RUSH24	Analyzed by:	see "By" below		
P.O.#:	586087				

Laboratory Data

SDG ID: GAS23551
Phoenix ID: AS23551

Project ID: NEPAUG DAM
Client ID: 11-13 WATER

Parameter	Result	RL	Units	Date	Time	By	Reference
Extraction of DW PCB'S	Completed			09/14/09		E	508
Polychlorinated Biphenyls (508)							
PCB-1016	ND	0.5	ug/l	09/14/09		MH	508
PCB-1221	ND	0.5	ug/l	09/14/09		MH	508
PCB-1232	ND	0.5	ug/l	09/14/09		MH	508
PCB-1242	ND	0.5	ug/l	09/14/09		MH	508
PCB-1248	ND	0.5	ug/l	09/14/09		MH	508
PCB-1254	ND	0.5	ug/l	09/14/09		MH	508
PCB-1260	ND	0.5	ug/l	09/14/09		MH	508
PCB-1262	ND	0.5	ug/l	09/14/09		MH	508
PCB-1268	ND	0.5	ug/l	09/14/09		MH	508
QA/QC Surrogates							
%DCBP (Surrogate Rec)	63		%	09/14/09		MH	508
%TCMX (Surrogate Rec)	79		%	09/14/09		MH	508

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
September 15, 2009

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

September 15, 2009

FOR: Attn: Mr. Marc Nettleton
The Metropolitan District
555 Main Street
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		09/11/09	11:10
Location Code:	MDC-WPCF	Received by:	SW	09/11/09	17:04
Rush Request:	RUSH24	Analyzed by:	see "By" below		
P.O.#:	586087				

Laboratory Data

SDG ID: GAS23551
Phoenix ID: AS23552

Project ID: NEPAUG DAM
Client ID: 11-13 CAULK G

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	09/14/09		c-JL	E160.3
Caulk Extraction for PCB	Completed			09/11/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	83000000	ug/Kg	09/14/09		MH	3540C/8082
PCB-1221	ND	83000000	ug/Kg	09/14/09		MH	3540C/8082
PCB-1232	ND	83000000	ug/Kg	09/14/09		MH	3540C/8082
PCB-1242	ND	83000000	ug/Kg	09/14/09		MH	3540C/8082
PCB-1248	ND	83000000	ug/Kg	09/14/09		MH	3540C/8082
PCB-1254	ND	83000000	ug/Kg	09/14/09		MH	3540C/8082
PCB-1260	240000000	83000000	ug/Kg	09/14/09		MH	3540C/8082
PCB-1262	ND	83000000	ug/Kg	09/14/09		MH	3540C/8082
PCB-1268	ND	83000000	ug/Kg	09/14/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	09/14/09		MH	3540C/8082
% TCMX	Diluted Out		%	09/14/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
September 15, 2009

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Report

September 15, 2009

FOR: Attn: Mr. Marc Nettleton
The Metropolitan District
555 Main Street
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		09/11/09	11:05
Location Code:	MDC-WPCF	Received by:	SW	09/11/09	17:04
Rush Request:	RUSH24	Analyzed by:	see "By" below		
P.O.#:	586087				

Laboratory Data

SDG ID: GAS23551
Phoenix ID: AS23553

Project ID: NEPAUG DAM
Client ID: 11-13 CAULK W

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	09/14/09		c-JL	E160.3
Caulk Extraction for PCB	Completed			09/11/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1221	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1232	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1242	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1248	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1254	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1260	150000	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1262	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1268	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	09/13/09		MH	3540C/8082
% TCMX	Diluted Out		%	09/13/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller

Phyllis Shiller, Laboratory Director
September 15, 2009

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

September 15, 2009

FOR: Attn: Mr. Marc Nettleton
The Metropolitan District
555 Main Street
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		09/11/09	11:40
Location Code:	MDC-WPCF	Received by:	SW	09/11/09	17:04
Rush Request:	RUSH24	Analyzed by:	see "By" below		
P.O.#:	586087				

Laboratory Data

SDG ID: GAS23551
Phoenix ID: AS23554

Project ID: NEPAUG DAM
Client ID: 11-13 CONCRETE D

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	09/14/09		c-JL	E160.3
Caulk Extraction for PCB	Completed			09/11/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1221	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1232	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1242	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1248	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1254	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1260	43000	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1262	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1268	ND	17000	ug/Kg	09/13/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	09/13/09		MH	3540C/8082
% TCMX	Diluted Out		%	09/13/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
September 15, 2009

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

September 15, 2009

FOR: Attn: Mr. Marc Nettleton
The Metropolitan District
555 Main Street
Hartford, CT 06142

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		09/11/09	11:30
Location Code:	MDC-WPCF	Received by:	SW	09/11/09	17:04
Rush Request:	RUSH24	Analyzed by:	see "By" below		
P.O.#:	586087				

Laboratory Data

SDG ID: GAS23551
Phoenix ID: AS23555

Project ID: NEPAUG DAM
Client ID: 11-13 CONCRETE S

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	09/14/09		c-JL	E160.3
Caulk Extraction for PCB	Completed			09/11/09		BB/E	SW3540C
Polychlorinated Biphenyls							
PCB-1016	ND	2600000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1221	ND	2600000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1232	ND	2600000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1242	ND	2600000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1248	ND	2600000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1254	ND	2600000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1260	4200000	2600000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1262	ND	2600000	ug/Kg	09/13/09		MH	3540C/8082
PCB-1268	ND	2600000	ug/Kg	09/13/09		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	09/13/09		MH	3540C/8082
% TCMX	Diluted Out		%	09/13/09		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
September 15, 2009

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

QA/QC Report

September 15, 2009

QA/QC Data

SDG I.D.: GAS23551

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 135233, QC Sample No: AS19146 (AS23551)							
Pesticides							
4,4' -DDD	ND	128	128	0.0			
4,4' -DDE	ND	107	109	1.9			
4,4' -DDT	ND	97	99	2.0			
a-BHC	ND	93	94	1.1			
a-Chlordane	ND	97	99	2.0			
Alachlor	ND	N/A	N/A	NC			
Aldrin	ND	87	90	3.4			
b-BHC	ND	93	93	0.0			
Chlordane	ND	N/A	N/A	NC			
d-BHC	ND	97	99	2.0			
Dieldrin	ND	96	97	1.0			
Endosulfan I	ND	110	112	1.8			
Endosulfan II	ND	108	110	1.8			
Endosulfan sulfate	ND	95	95	0.0			
Endrin	ND	98	100	2.0			
Endrin aldehyde	ND	110	110	0.0			
Endrin ketone	ND	102	102	0.0			
g-BHC	ND	90	92	2.2			
g-Chlordane	ND	94	94	0.0			
Heptachlor	ND	84	90	6.9			
Heptachlor epoxide	ND	94	95	1.1			
Methoxychlor	ND	103	101	2.0			
Toxaphene	ND	N/A	N/A	NC			
% DCBP	71	190	205	7.6			
% TCMX	68	180	188	4.3			
QA/QC Batch 135661, QC Sample No: AS23067 (AS23552, AS23553, AS23554, AS23555)							
Polychlorinated Biphenyls							
PCB-1016	ND	125	112	11.0	*	*	NC
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	96	97	1.0	*	*	NC
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	79	71	72	1.4	NR	NR	NC

QA/QC Data

SDG I.D.: GAS23551

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
% TCMX (Surrogate Rec)	91	74	73	1.4	NR	NR	NC

Comment:

* The batch MS and MSD recoveries could not be calculated due to the presence of PCB in the unspiked sample. LCS/LCSD recoveries were within QA/QC limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
September 15, 2009

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: service@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 2.0(0)C Pg 1 of 1

Data Delivery:
☐ Fax #:
☒ Email: mnettleton@thenmdc.com

Customer: MDC
Address: 555 Main St. P.O. Box 800
Hartford, CT 06142-0800

Project: Nepaug DAM
Report to: Marc Nettleton
Invoice to: Marc Nettleton

Project P.O: 586087
Phone #: 860-278-7850 * 3439
Fax #: 860.251-6141

Client Sample - Information - Identification

Sampler's Signature: [signature] Date 9/11/09

Matrix Code:
DW=drinking water WW=wastewater S=soil/solid O=other
GW=groundwater SL=sludge A=air

Analysis Request

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	PCB Soxhlet extraction & Clean up	PCB	Soil VOA [ ] Methanol [ ] S. Bisulfate [ ] H20	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [X] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
23551	11-13 water	DW	9/11	1058		✓				2						
23552	11-13 Caulk G	S	9/11	1110	✓			✓								
23553	11-13 Caulk W	S	9/11	1105	✓			✓								
23554	11-13 Concrete D	S	9/11	1140	✓			✓								
23555	11-13 Concrete S	S	9/11	1130	✓			✓								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	9/11/09	17:04

Turnaround:
☒ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ Standard
☐ Other

* SURCHARGE APPLIES

CT/RI
☐ RCP Cert.
☐ GW Protect.
☐ GA Mobility
☐ GB Mobility
☐ SW Protect.
☐ Res. Vol.
☐ Ind. Vol.
☐ Res. Criteria
☐ Other

MA
☐ MCP Cert.
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ ASP-A
☐ NJ Reduced Deliv. *
☐ NJ Hazsite EDD
☐ Phoenix Std Report
☐ Other

State where samples were collected: CT

Comments, Special Requirements or Regulations:
11-13 water 0.5 mg/L detection 2 1 liter bottles
11-13 Caulk G may be high in PCBs if this is the source.
Both Caulk Samples – Run Caulk only, no debris or Concrete from edges.

ANALYTICAL REPORT

Lab Number:	L1011170
Client:	GZA GeoEnvironmental, Inc. 1 Edgewater Drive Norwood, MA 02062
ATTN:	Dave E. Leone
Phone:	(781) 278-5766
Project Name:	NEPAUG DAM
Project Number:	19395.60
Report Date:	07/29/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1011170
Report Date: 07/29/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1011170-01	WEST RETAINING WALL A	COLLINSVILLE, CT	07/21/10 00:00
L1011170-02	WEST RETAINING WALL B	COLLINSVILLE, CT	07/21/10 00:00
L1011170-03	WEST RETAINING WALL C	COLLINSVILLE, CT	07/21/10 00:00
L1011170-04	GATEHOUSE EAST VERTICAL	COLLINSVILLE, CT	07/21/10 00:00
L1011170-05	GATEHOUSE EXT. WINDOW	COLLINSVILLE, CT	07/21/10 00:00
L1011170-06	GATEHOUSE EXT. PAINT	COLLINSVILLE, CT	07/21/10 00:00

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1011170
Report Date: 07/29/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

PCB

L1011170-02 has elevated detection limits due to the dilution required by matrix interferences encountered during the concentration of the sample.

L1011170-04 has elevated detection limits due to the dilution required by the sample matrix.

The surrogate recoveries for L1011170-04 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene (0%) and Decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction is not required; therefore, the results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 07/29/10

ORGANICS

PCBS

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011170
Report Date: 07/29/10

SAMPLE RESULTS

Lab ID:	L1011170-01	Date Collected:	07/21/10 00:00
Client ID:	WEST RETAINING WALL A	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 10:44	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	333	--	1
Aroclor 1221	ND		ug/kg	333	--	1
Aroclor 1232	ND		ug/kg	333	--	1
Aroclor 1242	ND		ug/kg	333	--	1
Aroclor 1248	415		ug/kg	222	--	1
Aroclor 1254	ND		ug/kg	333	--	1
Aroclor 1260	319		ug/kg	222	--	1
Aroclor 1262	ND		ug/kg	111	--	1
Aroclor 1268	ND		ug/kg	111	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	47		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011170
Report Date: 07/29/10

SAMPLE RESULTS

Lab ID:	L1011170-02	Date Collected:	07/21/10 00:00
Client ID:	WEST RETAINING WALL B	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 10:56	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	196	--	3
Aroclor 1221	ND		ug/kg	196	--	3
Aroclor 1232	ND		ug/kg	196	--	3
Aroclor 1242	ND		ug/kg	196	--	3
Aroclor 1248	ND		ug/kg	130	--	3
Aroclor 1254	450		ug/kg	196	--	3
Aroclor 1260	447		ug/kg	130	--	3
Aroclor 1262	ND		ug/kg	65.2	--	3
Aroclor 1268	ND		ug/kg	65.2	--	3

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	146		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	120		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011170
Report Date: 07/29/10

SAMPLE RESULTS

Lab ID:	L1011170-03	Date Collected:	07/21/10 00:00
Client ID:	WEST RETAINING WALL C	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 11:08	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1254	157		ug/kg	56.8	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	34		30-150	A
Decachlorobiphenyl	108		30-150	A
2,4,5,6-Tetrachloro-m-xylene	39		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011170
Report Date: 07/29/10

SAMPLE RESULTS

Lab ID:	L1011170-03	Date Collected:	07/21/10 00:00
Client ID:	WEST RETAINING WALL C	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 11:08	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	56.8	--	1
Aroclor 1221	ND		ug/kg	56.8	--	1
Aroclor 1232	ND		ug/kg	56.8	--	1
Aroclor 1242	ND		ug/kg	56.8	--	1
Aroclor 1248	ND		ug/kg	37.9	--	1
Aroclor 1260	ND		ug/kg	37.9	--	1
Aroclor 1262	ND		ug/kg	18.9	--	1
Aroclor 1268	ND		ug/kg	18.9	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	34		30-150	A
Decachlorobiphenyl	108		30-150	A
2,4,5,6-Tetrachloro-m-xylene	39		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011170
Report Date: 07/29/10

SAMPLE RESULTS

Lab ID:	L1011170-04 D	Date Collected:	07/21/10 00:00
Client ID:	GATEHOUSE EAST VERTICAL	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 12:14	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	4200	--	20
Aroclor 1221	ND		ug/kg	4200	--	20
Aroclor 1232	ND		ug/kg	4200	--	20
Aroclor 1242	ND		ug/kg	4200	--	20
Aroclor 1248	ND		ug/kg	2800	--	20
Aroclor 1254	ND		ug/kg	4200	--	20
Aroclor 1260	ND		ug/kg	2800	--	20
Aroclor 1262	ND		ug/kg	1400	--	20
Aroclor 1268	ND		ug/kg	1400	--	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011170
Report Date: 07/29/10

SAMPLE RESULTS

Lab ID:	L1011170-05	Date Collected:	07/21/10 00:00
Client ID:	GATEHOUSE EXT. WINDOW	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 12:26	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	106	--	1
Aroclor 1221	ND		ug/kg	106	--	1
Aroclor 1232	ND		ug/kg	106	--	1
Aroclor 1242	ND		ug/kg	106	--	1
Aroclor 1248	ND		ug/kg	70.7	--	1
Aroclor 1254	ND		ug/kg	106	--	1
Aroclor 1260	ND		ug/kg	70.7	--	1
Aroclor 1262	ND		ug/kg	35.3	--	1
Aroclor 1268	ND		ug/kg	35.3	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011170
Report Date: 07/29/10

SAMPLE RESULTS

Lab ID:	L1011170-06	Date Collected:	07/21/10 00:00
Client ID:	GATEHOUSE EXT. PAINT	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 12:39	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	200	--	1
Aroclor 1221	ND		ug/kg	200	--	1
Aroclor 1232	ND		ug/kg	200	--	1
Aroclor 1242	ND		ug/kg	200	--	1
Aroclor 1248	ND		ug/kg	133	--	1
Aroclor 1254	ND		ug/kg	200	--	1
Aroclor 1260	213		ug/kg	133	--	1
Aroclor 1262	ND		ug/kg	66.7	--	1
Aroclor 1268	ND		ug/kg	66.7	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	145		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1011170
Report Date: 07/29/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 07/29/10 10:07
Analyst: KB

Extraction Method: EPA 3540C
Extraction Date: 07/27/10 22:30
Cleanup Method1: EPA 3665A
Cleanup Date1: 07/29/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 07/29/10

Parameter	Result	Qualifier	Units	RL	MDL
PCB by GC - Westborough Lab for sample(s): 01-06 Batch: WG424756-1					
Aroclor 1016	ND		ug/kg	60.0	--
Aroclor 1221	ND		ug/kg	60.0	--
Aroclor 1232	ND		ug/kg	60.0	--
Aroclor 1242	ND		ug/kg	60.0	--
Aroclor 1248	ND		ug/kg	40.0	--
Aroclor 1254	ND		ug/kg	60.0	--
Aroclor 1260	ND		ug/kg	40.0	--
Aroclor 1262	ND		ug/kg	20.0	--
Aroclor 1268	ND		ug/kg	20.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	72		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEPAUG DAM

Project Number: 19395.60

Lab Number: L1011170

Report Date: 07/29/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG424756-2 WG424756-3								
Aroclor 1016	108		123		40-140	13		50
Aroclor 1260	106		111		40-140	5		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		107		30-150	A
Decachlorobiphenyl	92		96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		76		30-150	B
Decachlorobiphenyl	78		77		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1011170
Report Date: 07/29/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1011170-01A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011170-02A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011170-03A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011170-04A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011170-05A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011170-06A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()

*Values in parentheses indicate holding time in days

Project Name:	NEPAUG DAM	**Lab Number:**	L1011170
Project Number:	19395.60	**Report Date:**	07/29/10

GLOSSARY

Acronyms

EPA · Environmental Protection Agency.

LCS · Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD · Laboratory Control Sample Duplicate: Refer to LCS.

MDL · Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS · Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD · Matrix Spike Sample Duplicate: Refer to MS.

NA · Not Applicable.

NC · Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI · Not Ignitable.

RL · Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD · Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

Report Format: Data Usability Report

Project Name:	NEPAUG DAM	**Lab Number:**	L1011170
Project Number:	19395.60	**Report Date:**	07/29/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	NEPAUG DAM	**Lab Number:**	L1011170
Project Number:	19395.60	**Report Date:**	07/29/10

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)
Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)
*Solid Waste/Soil (*Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.
Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D
Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)
Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A , 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

CHAIN OF CUSTODY

PAGE 2 OF 2

Date Rec'd in Lab: 7/22/10

ALPHA Job #: L1011170

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: GZA
Address: 1 Edgewater Dr.
Norwood MA 02062
Phone: 781-278-5785 or 5766
Fax:
Email: timothy.dumey@gza.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Nepaug Dam
Project Location: Collinsville, CT
Project #: 19395.60
Project Manager: David E. Leone
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 7/29/10 Time:

Other Project Specific Requirements/Comments/Detection Limits:
davide.leone@gza.com

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☑ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #: 19395.30

Regulatory Requirements/Report Limits

State /Fed Program: EPA TSCA
Criteria:

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO-

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: PCBs - 8082	SAMPLE HANDLING	TOTAL # BOTTLES
1170.1	West Retaining Wall A	7/21/10		X1	SC/TMD	X	Can IC	1
2	West Retaining Wall B							
3	West Retaining Wall C							
4	Gatehouse East Vertical				TMD			
5	Gatehouse Ext. window				TMD			
6	Gatehouse Ext. Paint						Paint	

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do (Please specify below)

Container Type: P
Preservative: A

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	7/22/10 1230		7/22/10 1230
	7/22/10 1605		7/22/10 1605

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L1011171
Client:	GZA GeoEnvironmental, Inc. 1 Edgewater Drive Norwood, MA 02062
ATTN:	Dave E. Leone
Phone:	(781) 278-5766
Project Name:	NEPAUG DAM
Project Number:	19395.60
Report Date:	07/31/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1011171
Report Date: 07/31/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1011171-01	3/5 BUTTRESS, EAST	COLLINSVILLE, CT	07/21/10 00:00
L1011171-02	6/8 BUTTRESS, WEST	COLLINSVILLE, CT	07/21/10 00:00
L1011171-03	6/8 BUTTRESS, WEST	COLLINSVILLE, CT	07/21/10 00:00
L1011171-04	7/9 SPAN	COLLINSVILLE, CT	07/21/10 00:00
L1011171-05	8/10 SPAN	COLLINSVILLE, CT	07/21/10 00:00
L1011171-06	10/12 SPAN	COLLINSVILLE, CT	07/21/10 00:00
L1011171-07	DUPLICATE A	COLLINSVILLE, CT	07/21/10 00:00
L1011171-08	DUPLICATE B	COLLINSVILLE, CT	07/21/10 00:00

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011171
Report Date: 07/31/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

PCB by GC

L1011171-01, -03 and -08 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

L1011171-02 and -05 have elevated detection limits due to the dilution required by matrix interferences encountered during the concentration of the samples.

The surrogate recoveries for L1011171-01, -03 and -08 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene and Decachlorobiphenyl (all at 0%) due to the dilutions required to quantitate the samples. Re-extraction is not required; therefore, the results of the original analysis are reported.

The surrogate recovery for L1011171-02 is outside the individual acceptance criteria for Decachlorobiphenyl(209%), but within the overall method allowances. The results of the original analysis are reported; however, all associated compounds are considered to have a potential bias.

The surrogate recoveries for L1011171-04 are outside the acceptance criteria for Decachlorobiphenyl

Project Name:	NEPAUG DAM	**Lab Number:**	L1011171
Project Number:	19395.60	**Report Date:**	07/31/10

Case Narrative (continued)

(528%/314%); however, the sample was not re-extracted due to coelution with obvious interferences. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.
The surrogate recoveries for L1011171-05 are outside the acceptance criteria for Decachlorobiphenyl (2420%/3600%); however, the sample was not re-extracted due to coelution with obvious interferences. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.
The surrogate recoveries for L1011171-06 are outside the acceptance criteria for Decachlorobiphenyl (205%/663%); however, the sample was not re-extracted due to coelution with obvious interferences. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.
The surrogate recoveries for L1011171-07 are outside the acceptance criteria for Decachlorobiphenyl (263%/1070%); however, the sample was not re-extracted due to coelution with obvious interferences. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.
The surrogate recovery for the WG425201-2 LCS, associated with L1011171-02, is outside the individual acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene (28%), but within the overall method allowances. The results of the original analysis are reported; however, all associated compounds are considered to have a potential bias.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Lisa Westerlind

Title: Technical Director/Representative Date: 07/31/10

ORGANICS

PCBS

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011171
Report Date: 07/31/10

SAMPLE RESULTS

Lab ID:	L1011171-01 D	Date Collected:	07/21/10 00:00
Client ID:	3/5 BUTTRESS, EAST	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	1,8082	Extraction Date:	07/28/10 07:16
Analytical Date:	07/29/10 10:27	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/28/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/28/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	27300000	--	10000
Aroclor 1221	ND		ug/kg	27300000	--	10000
Aroclor 1232	ND		ug/kg	27300000	--	10000
Aroclor 1242	ND		ug/kg	27300000	--	10000
Aroclor 1248	ND		ug/kg	18200000	--	10000
Aroclor 1254	ND		ug/kg	27300000	--	10000
Aroclor 1262	ND		ug/kg	9090000	--	10000
Aroclor 1268	ND		ug/kg	9090000	--	10000

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011171
Report Date: 07/31/10

SAMPLE RESULTS

Lab ID:	L1011171-01 D	Date Collected:	07/21/10 00:00
Client ID:	3/5 BUTTRESS, EAST	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	1,8082	Extraction Date:	07/28/10 07:16
Analytical Date:	07/29/10 10:27	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/28/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/28/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1260	238000000		ug/kg	18200000	--	10000

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011171
Report Date: 07/31/10

SAMPLE RESULTS

Lab ID:	L1011171-02	Date Collected:	07/21/10 00:00
Client ID:	6/8 BUTTRESS, WEST	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/30/10 01:00
Analytical Date:	07/31/10 14:06	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/31/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/31/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	1500	--	5
Aroclor 1221	ND		ug/kg	1500	--	5
Aroclor 1232	ND		ug/kg	1500	--	5
Aroclor 1242	ND		ug/kg	1500	--	5
Aroclor 1248	ND		ug/kg	1000	--	5
Aroclor 1254	ND		ug/kg	1500	--	5
Aroclor 1260	26300		ug/kg	1000	--	5
Aroclor 1262	ND		ug/kg	500	--	5
Aroclor 1268	ND		ug/kg	500	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	**209**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	60		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011171
Report Date: 07/31/10

SAMPLE RESULTS

Lab ID:	L1011171-03 D	Date Collected:	07/21/10 00:00
Client ID:	6/8 BUTTRESS, WEST	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	1,8082	Extraction Date:	07/28/10 07:16
Analytical Date:	07/29/10 12:06	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/28/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/28/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	3220000	--	1000
Aroclor 1221	ND		ug/kg	3220000	--	1000
Aroclor 1232	ND		ug/kg	3220000	--	1000
Aroclor 1242	ND		ug/kg	3220000	--	1000
Aroclor 1248	ND		ug/kg	2150000	--	1000
Aroclor 1254	ND		ug/kg	3220000	--	1000
Aroclor 1260	20500000		ug/kg	2150000	--	1000
Aroclor 1262	ND		ug/kg	1080000	--	1000
Aroclor 1268	ND		ug/kg	1080000	--	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011171
Report Date: 07/31/10

SAMPLE RESULTS

Lab ID:	L1011171-04	Date Collected:	07/21/10 00:00
Client ID:	7/9 SPAN	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 12:51	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	232	--	1
Aroclor 1221	ND		ug/kg	232	--	1
Aroclor 1232	ND		ug/kg	232	--	1
Aroclor 1242	ND		ug/kg	232	--	1
Aroclor 1248	ND		ug/kg	155	--	1
Aroclor 1254	ND		ug/kg	232	--	1
Aroclor 1260	ND		ug/kg	155	--	1
Aroclor 1262	ND		ug/kg	77.5	--	1
Aroclor 1268	ND		ug/kg	77.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	51		30-150	A
Decachlorobiphenyl	**528**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	**314**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011171
Report Date: 07/31/10

SAMPLE RESULTS

Lab ID:	L1011171-05	Date Collected:	07/21/10 00:00
Client ID:	8/10 SPAN	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 13:03	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	120	--	5
Aroclor 1221	ND		ug/kg	120	--	5
Aroclor 1232	ND		ug/kg	120	--	5
Aroclor 1242	ND		ug/kg	120	--	5
Aroclor 1248	ND		ug/kg	80.0	--	5
Aroclor 1254	ND		ug/kg	120	--	5
Aroclor 1260	ND		ug/kg	80.0	--	5
Aroclor 1262	ND		ug/kg	40.0	--	5
Aroclor 1268	ND		ug/kg	40.0	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	41		30-150	A
Decachlorobiphenyl	**2420**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	**3600**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011171
Report Date: 07/31/10

SAMPLE RESULTS

Lab ID:	L1011171-06	Date Collected:	07/21/10 00:00
Client ID:	10/12 SPAN	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 13:15	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	62.6	--	1
Aroclor 1221	ND		ug/kg	62.6	--	1
Aroclor 1232	ND		ug/kg	62.6	--	1
Aroclor 1242	ND		ug/kg	62.6	--	1
Aroclor 1248	ND		ug/kg	41.8	--	1
Aroclor 1254	ND		ug/kg	62.6	--	1
Aroclor 1260	ND		ug/kg	41.8	--	1
Aroclor 1262	ND		ug/kg	20.9	--	1
Aroclor 1268	ND		ug/kg	20.9	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	39		30-150	A
Decachlorobiphenyl	**205**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	40		30-150	B
Decachlorobiphenyl	**663**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011171
Report Date: 07/31/10

SAMPLE RESULTS

Lab ID:	L1011171-07	Date Collected:	07/21/10 00:00
Client ID:	DUPLICATE A	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	07/27/10 22:30
Analytical Date:	07/29/10 13:28	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/29/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/29/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	54.4	--	1
Aroclor 1221	ND		ug/kg	54.4	--	1
Aroclor 1232	ND		ug/kg	54.4	--	1
Aroclor 1242	ND		ug/kg	54.4	--	1
Aroclor 1248	ND		ug/kg	36.3	--	1
Aroclor 1254	ND		ug/kg	54.4	--	1
Aroclor 1260	ND		ug/kg	36.3	--	1
Aroclor 1262	ND		ug/kg	18.1	--	1
Aroclor 1268	ND		ug/kg	18.1	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	40		30-150	A
Decachlorobiphenyl	**263**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	45		30-150	B
Decachlorobiphenyl	**1070**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1011171
Report Date: 07/31/10

SAMPLE RESULTS

Lab ID:	L1011171-08 D	Date Collected:	07/21/10 00:00
Client ID:	DUPLICATE B	Date Received:	07/22/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	1,8082	Extraction Date:	07/28/10 07:16
Analytical Date:	07/29/10 11:04	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	07/28/10
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	07/28/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	28300000	--	10000
Aroclor 1221	ND		ug/kg	28300000	--	10000
Aroclor 1232	ND		ug/kg	28300000	--	10000
Aroclor 1242	ND		ug/kg	28300000	--	10000
Aroclor 1248	ND		ug/kg	18900000	--	10000
Aroclor 1254	ND		ug/kg	28300000	--	10000
Aroclor 1260	210000000		ug/kg	18900000	--	10000
Aroclor 1262	ND		ug/kg	9430000	--	10000
Aroclor 1268	ND		ug/kg	9430000	--	10000

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1011171
Report Date: 07/31/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 07/29/10 10:07
Analyst: KB

Extraction Method: EPA 3540C
Extraction Date: 07/27/10 22:30
Cleanup Method1: EPA 3665A
Cleanup Date1: 07/29/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 07/29/10

Parameter	Result	Qualifier	Units	RL	MDL
PCB by GC - Westborough Lab for sample(s): 04-07 Batch: WG424756-1					
Aroclor 1016	ND		ug/kg	60.0	--
Aroclor 1221	ND		ug/kg	60.0	--
Aroclor 1232	ND		ug/kg	60.0	--
Aroclor 1242	ND		ug/kg	60.0	--
Aroclor 1248	ND		ug/kg	40.0	--
Aroclor 1254	ND		ug/kg	60.0	--
Aroclor 1260	ND		ug/kg	40.0	--
Aroclor 1262	ND		ug/kg	20.0	--
Aroclor 1268	ND		ug/kg	20.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1011171
Report Date: 07/31/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 07/28/10 13:35
Analyst: KB

Extraction Method: EPA 3580A
Extraction Date: 07/28/10 07:16
Cleanup Method1: EPA 3665A
Cleanup Date1: 07/28/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 07/28/10

Parameter	Result	Qualifier	Units	RL	MDL
PCB by GC - Westborough Lab for sample(s): 01,03,08 Batch: WG424774-1					
Aroclor 1016	ND		ug/kg	3000	--
Aroclor 1221	ND		ug/kg	3000	--
Aroclor 1232	ND		ug/kg	3000	--
Aroclor 1242	ND		ug/kg	3000	--
Aroclor 1248	ND		ug/kg	2000	--
Aroclor 1254	ND		ug/kg	3000	--
Aroclor 1260	ND		ug/kg	2000	--
Aroclor 1262	ND		ug/kg	1000	--
Aroclor 1268	ND		ug/kg	1000	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	99		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	97		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1011171
Report Date: 07/31/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 07/31/10 13:12
Analyst: KB

Extraction Method: EPA 3540C
Extraction Date: 07/30/10 01:00
Cleanup Method1: EPA 3665A
Cleanup Date1: 07/31/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 07/31/10

Parameter	Result	Qualifier	Units	RL	MDL
PCB by GC - Westborough Lab for sample(s): 02 Batch: WG425201-1					
Aroclor 1016	ND		ug/kg	300	--
Aroclor 1221	ND		ug/kg	300	--
Aroclor 1232	ND		ug/kg	300	--
Aroclor 1242	ND		ug/kg	300	--
Aroclor 1248	ND		ug/kg	200	--
Aroclor 1254	ND		ug/kg	300	--
Aroclor 1260	ND		ug/kg	200	--
Aroclor 1262	ND		ug/kg	100	--
Aroclor 1268	ND		ug/kg	100	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	35		30-150	A
Decachlorobiphenyl	35		30-150	A
2,4,5,6-Tetrachloro-m-xylene	49		30-150	B
Decachlorobiphenyl	47		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEPAUG DAM

Project Number: 19395.60

Lab Number: L1011171

Report Date: 07/31/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB by GC - Westborough Lab Associated sample(s): 04-07 Batch: WG424756-2 WG424756-3								
Aroclor 1016	108		123		40-140	13		50
Aroclor 1260	106		111		40-140	5		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		107		30-150	A
Decachlorobiphenyl	92		96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		76		30-150	B
Decachlorobiphenyl	78		77		30-150	B

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB by GC - Westborough Lab Associated sample(s): 01,03,08 Batch: WG424774-2 WG424774-3								
Aroclor 1016	125		114		40-140	9		50
Aroclor 1260	98		98		40-140	0		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	103		93		30-150	A
Decachlorobiphenyl	97		90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	98		90		30-150	B
Decachlorobiphenyl	94		89		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEPAUG DAM

Project Number: 19395.60

Lab Number: L1011171

Report Date: 07/31/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB by GC - Westborough Lab Associated sample(s): 02 Batch: WG425201-2 WG425201-3								
Aroclor 1016	133		125		40-140	6		50
Aroclor 1260	64		57		40-140	12		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	28	Q	43		30-150	A
Decachlorobiphenyl	34		42		30-150	A
2,4,5,6-Tetrachloro-m-xylene	42		61		30-150	B
Decachlorobiphenyl	49		53		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1011171
Report Date: 07/31/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1011171-01A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011171-02A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011171-03A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011171-04A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011171-05A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011171-06A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011171-07A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()
L1011171-08A	Bag	A	N/A	4.6	Y	Absent	PCB-8082LL()

*Values in parentheses indicate holding time in days

Project Name:	NEPAUG DAM	**Lab Number:**	L1011171
Project Number:	19395.60	**Report Date:**	07/31/10

GLOSSARY

Acronyms

EPA	· Environmental Protection Agency.
LCS	· Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	· Laboratory Control Sample Duplicate: Refer to LCS.
MDL	· Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	· Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	· Matrix Spike Sample Duplicate: Refer to MS.
NA	· Not Applicable.
NC	· Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	· Not Ignitable.
RL	· Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	· Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
P	- The RPD between the results for the two columns exceeds the method-specified criteria.
Q	- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
R	- Analytical results are from sample re-analysis.

Report Format: Data Usability Report

Project Name:	NEPAUG DAM	**Lab Number:**	L1011171
Project Number:	19395.60	**Report Date:**	07/31/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	NEPAUG DAM	**Lab Number:**	L1011171
Project Number:	19395.60	**Report Date:**	07/31/10

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)
Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)
*Solid Waste/Soil (*Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.
Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D
Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)
Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A , 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA TECHNICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 7/22/10 ALPHA Job #: L1011171

Client Information
Client: GZA
Address: 1 Edgewater Dr. Norwood, MA 02062
Phone: 781-278-5785 or 5766
Fax:
Email: timothy.downey@gza.com
☐ These samples have been previously analyzed by Alpha

Project Information
Project Name: Nepaug Dam
Project Location: Collinsville, CT
Project #: 19395.60
Project Manager: David E. Leone
ALPHA Quote #:

Turn-Around Time
☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 7/29/10 Time:

Other Project Specific Requirements/Comments/Detection Limits:
david.e.leone@gza.com

Report Information - Data Deliverables
☐ FAX ☑ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information
☐ Same as Client info PO #: 19395.30 ~~60~~

Regulatory Requirements/Report Limits
State /Fed Program: *EPA ISCA* Criteria:

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO-
☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: PCBs - 8082	SAMPLE HANDLING / Sample Specific Comments	TOTAL # BOTTLES
1171. 1	3/5 Buttress, East	7/21/10		X 1	SCT/MD	X	Gray, vertical	1
2	6/8 Buttress, West						white, vertical	
3	6/8 Buttress, ~~East~~ West						Gray, vertical	
4	7/9 Span						white, vertical	
5	8/10 Span						white, vertical	
6	10/12 Span						white, vertical	
7	Duplicate A	"		"	"	"		
8	Duplicate B	"		"	"	"		

SAMPLE HANDLING: Filtration ☐ Done ☐ Not needed ☐ Lab to do; Preservation ☐ Lab to do (Please specify below)

Container Type	P
Preservative	A

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
Timothy M. Downey	7/22/10 1230		7/22/10 1230
	7/22/10 1600		7/22/10 1605

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

Data File: \\Orgserv1\ee\chem\GCEXT\Pest2.i\100729a.b\0729a013.d
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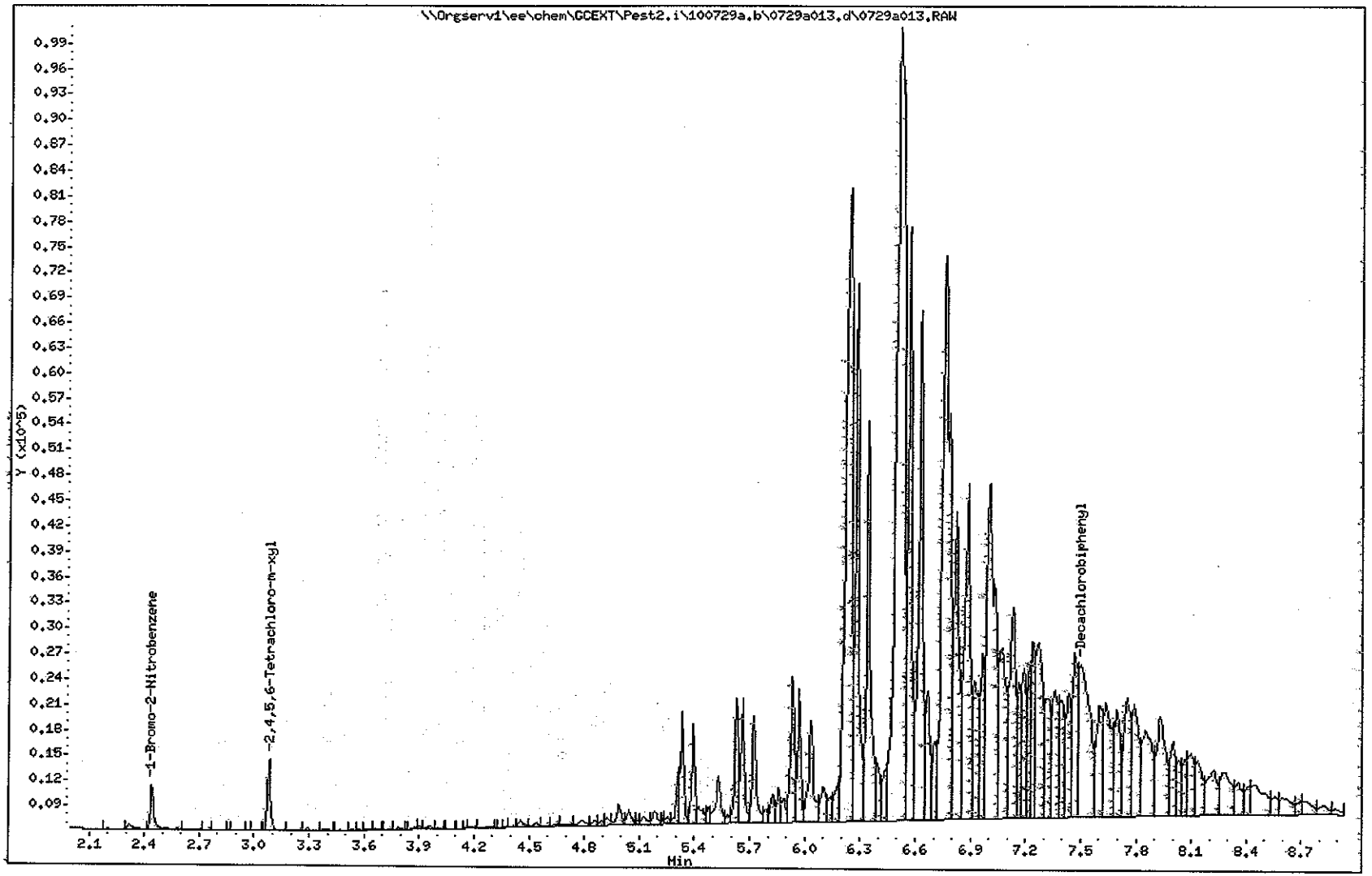
Client ID:
Sample Info: 11011171-04,42

Instrument: pest2.i
Operator: kb
Column diameter: 0.32

Column phase: Rtx-1701



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Sample Info: 11011171-04,42

Instrument: pest2.i
Operator: kb
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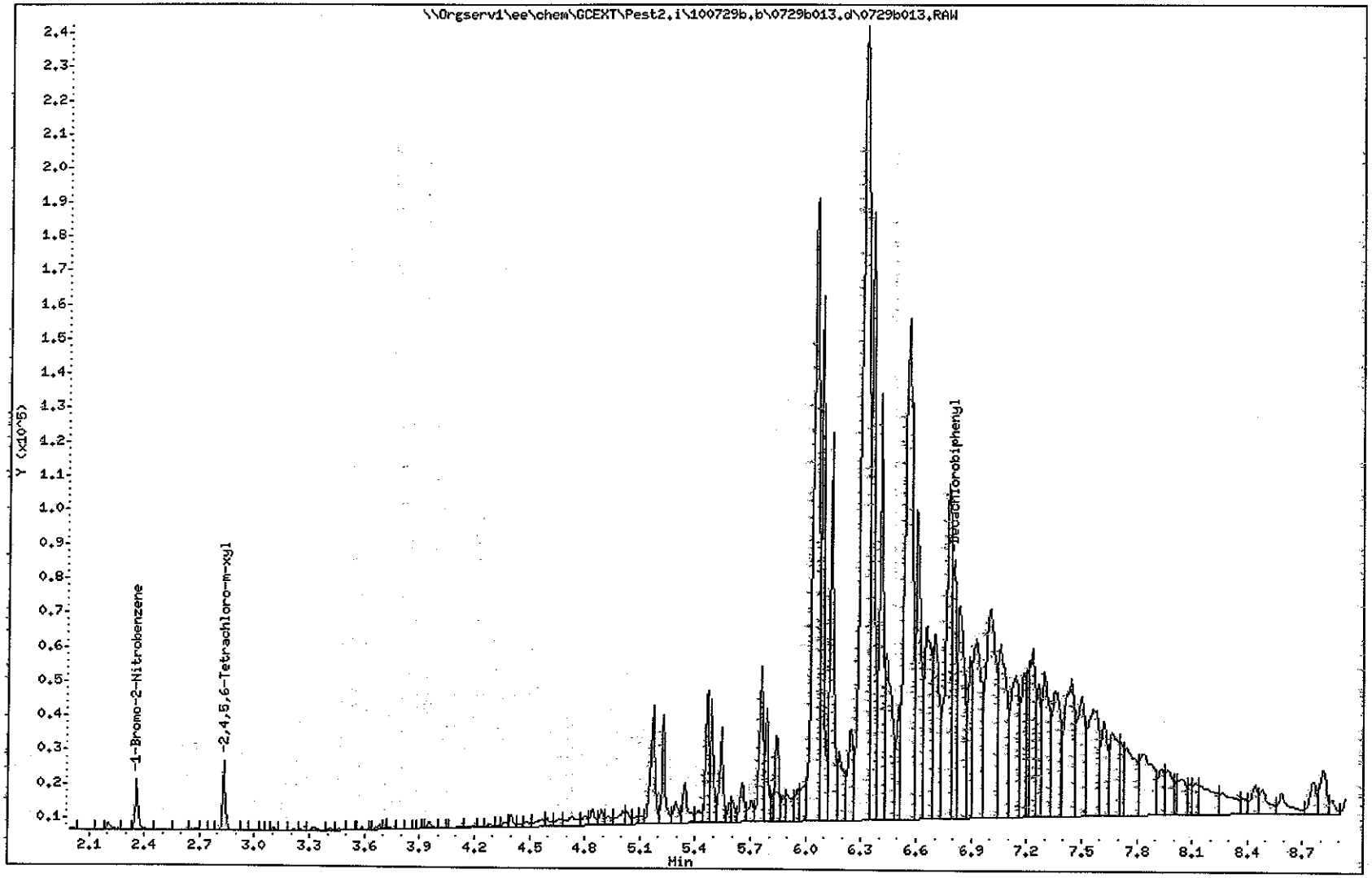
Column diameter: 0.32



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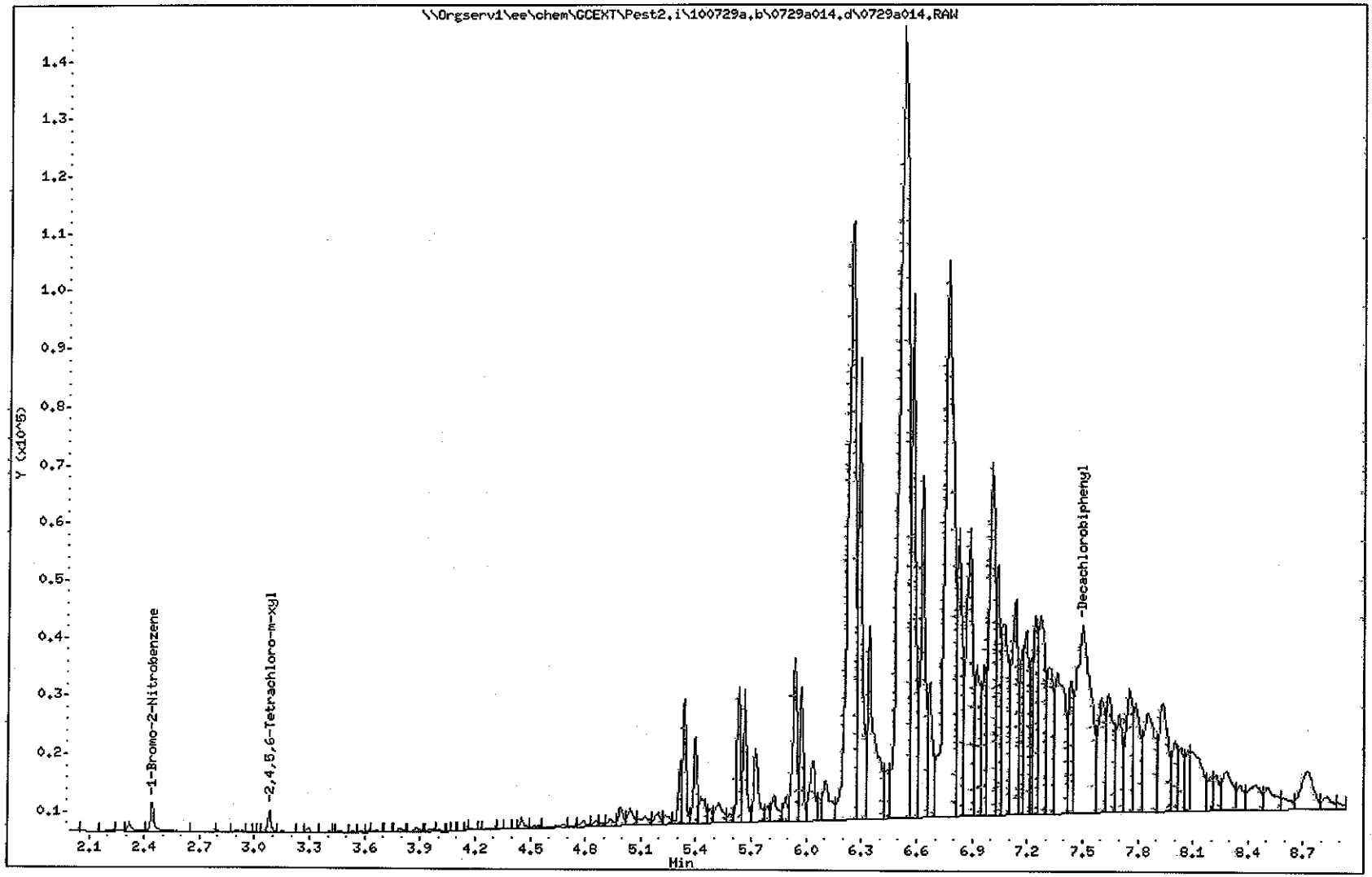
Sample Info: l1011171-05,42, fv2

Instrument: pest2.i

Operator: kb

Column phase: Rtx-1701
Column diameter: 0.32



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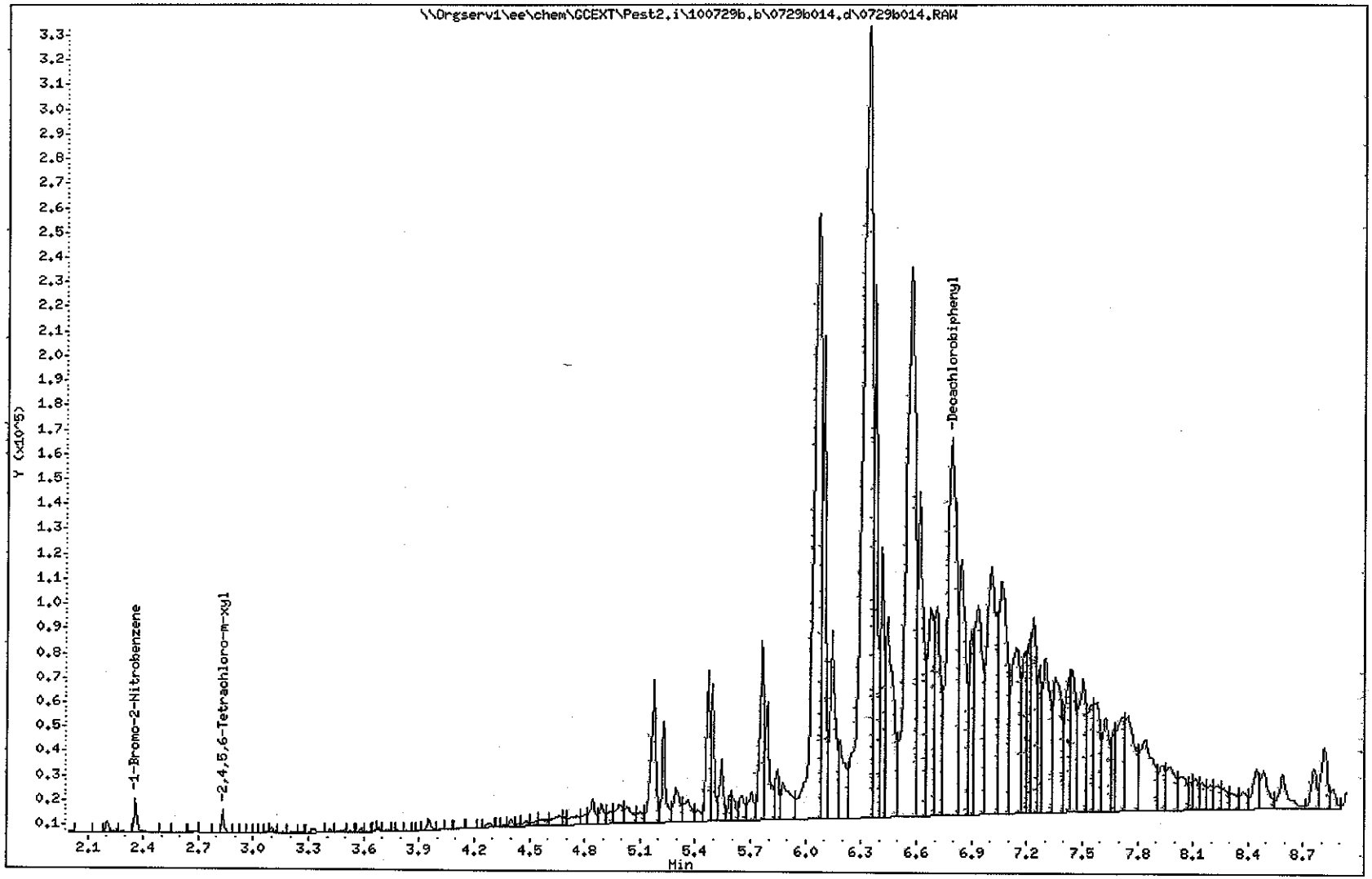
Sample Info: 11011171-05,42, fv2

Instrument: pest2.i
Operator: kb
Column diameter: 0.32

Column phase: Rtx-5



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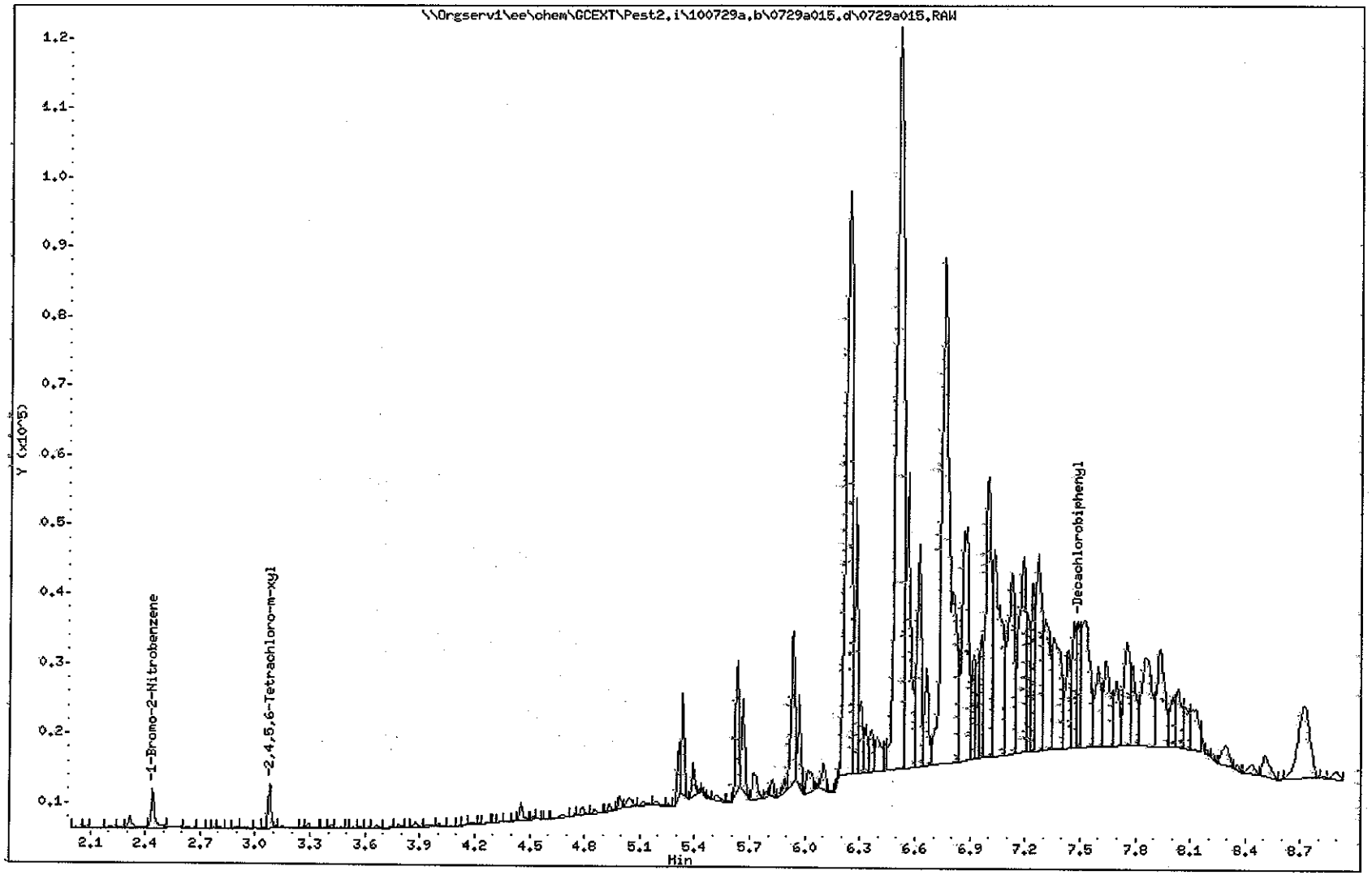
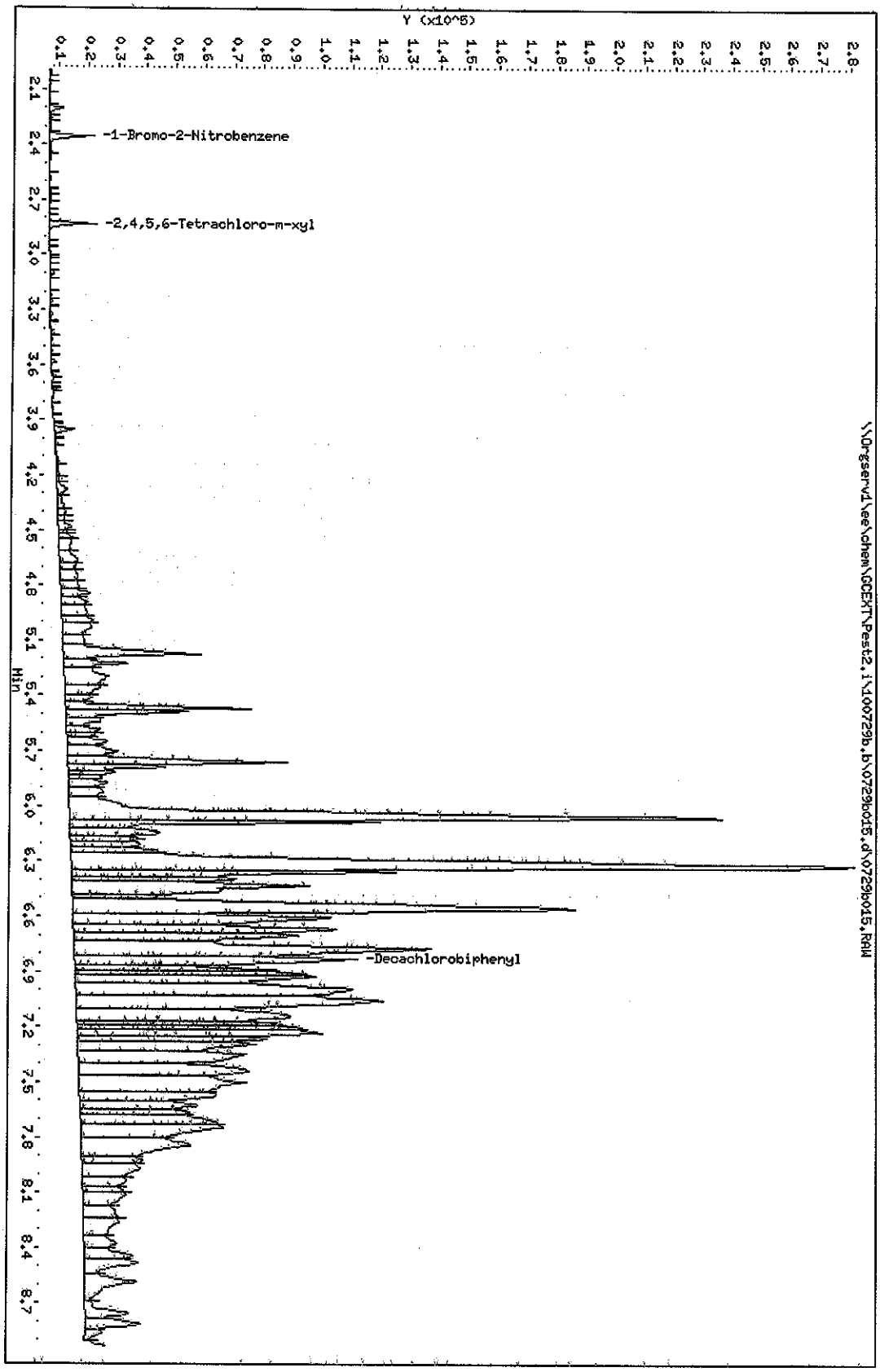
Sample Info: l1011171-06,42

Instrument: pest2.i
Operator: kb
Column diameter: 0.32

Column phase: Rtx-1701

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Client ID:
Sample Info: 11011171-06,42
Column phase: Rtx-5
Instrument: pest2.i
Operator: kb
Column diameter: 0.32
\\Orgserv1\ee\chem\GCEXT\Pest2.i\100729b.b\0729b015.d\0729b015.RAW
Y (x10^5)
-1-Bromo-2-Nitrobenzene
-2,4,5,6-Tetrachloro-m-xyl
-Decachlorobiphenyl
Min

Data File: \\Orgserv1\ee\chem\GCEXT\Pest2.i\100729a.b\0729a016.d
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Client ID:
Sample Info: 11011171-07,42

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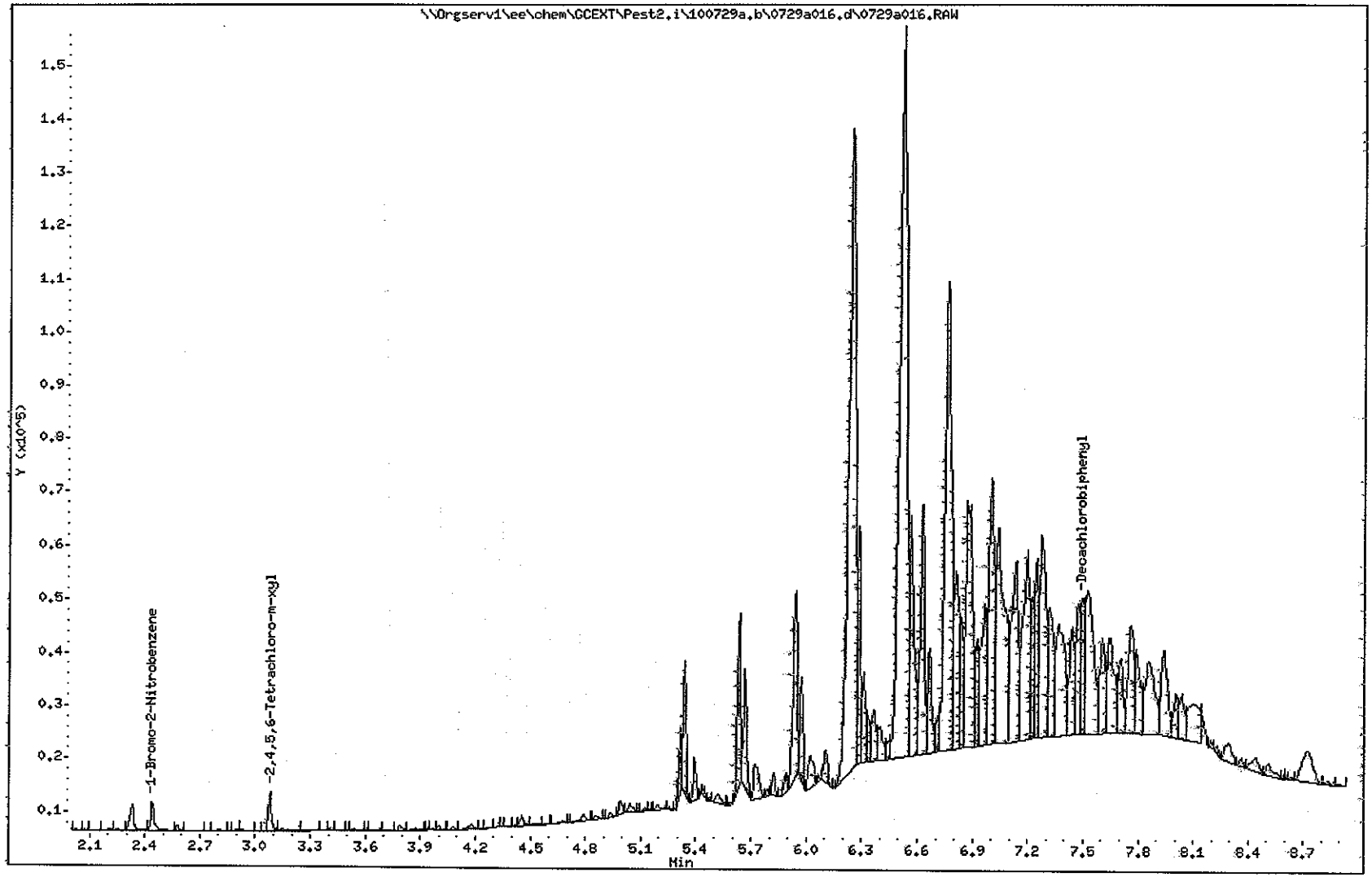
Operator: kb
Column diameter: 0.32

Column phase: Rtx-1701



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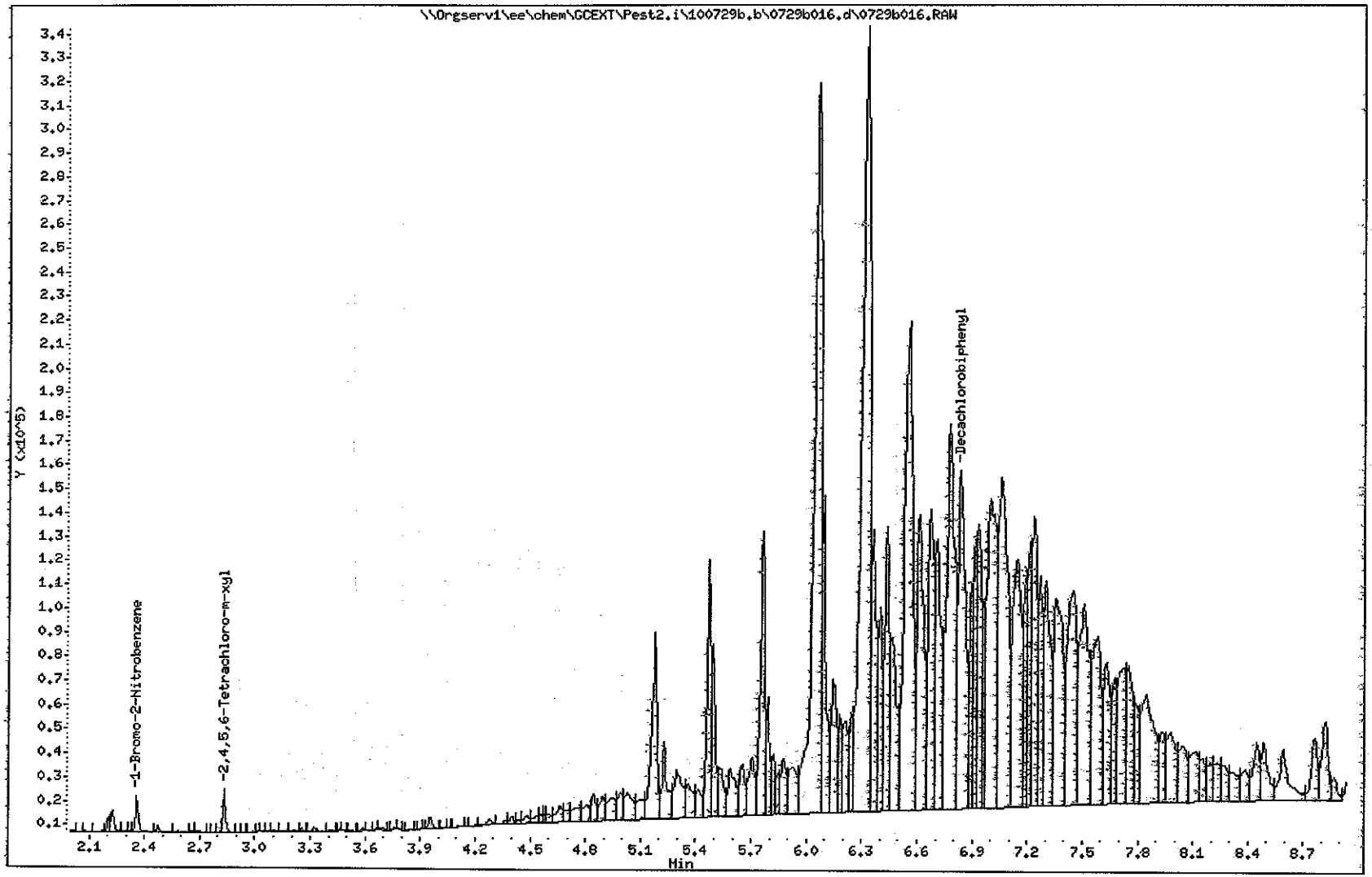
Instrument: pest2.i
Operator: kb
Column diameter: 0.32

Column phase: Rtx-5



ANALYTICAL REPORT

Lab Number:	L1012560
Client:	GZA GeoEnvironmental, Inc. 1 Edgewater Drive Norwood, MA 02062
ATTN:	Dave E. Leone
Phone:	(781) 278-5766
Project Name:	NEPAUG DAM
Project Number:	19395.60
Report Date:	08/19/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1012560
Report Date: 08/19/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1012560-01	1"OUT,0"-1/2,"EAST 3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-02	1"OUT, 1/2"-1", EAST, 3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-03	1"OUT,1"-1 1/2", EAST,3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-04	1"OUT,1 1/2"-2",EAST,3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-05	3"OUT,0"-1/2",EAST,3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-06	3"OUT,1/2"-1",EAST,3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-07	3"OUT,1"-1 1/2",3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-08	6"OUT,0"-1/2",EAST,3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-09	6"OUT,1/2"-1",EAST,3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-10	12"OUT,0"-1/2",EAST,3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-11	12"OUT,1/2"-1",EAST,3/5 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-12	1"OUT,0-1/2",WEST,6/8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-13	1"OUT,1/2"-1",WEST,6/8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-14	1"OUT,1"-1 1/2",WEST,6-8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-15	1"OUT,1 1/2"-2",WEST,6/8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-16	3"OUT,0"-1/2",WEST,6/8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-17	3"OUT,1/2"2",WEST,6/8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-18	3"OUT,1"-1 1/2"WEST,6/8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-19	6"OUT,0"-1/2",WEST,6/8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-20	6"OUT,1/2"-1",WEST 6/8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-21	12"OUT,0"-1/2",WEST,6/8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-22	12"OUT,1/2"-1", WEST, 6/8 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-23	1"OUT,0"-1/2", WEST,11/13 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-24	1"OUT,1/2"-1",EAST, 11/13 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-25	1"OUT,1-1 1/2",EAST,11/13 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-26	1"OUT,1 1/2-2",EAST,11/13 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-27	3"OUT,0"-1/2 ",EAST,11/13 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-28	3"OUT,1/2"-1",EAST, 11/13 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-29	3"OUT,1"-1 1/2",EAST,11/13SPAN	COLLINSVILLE, CT	08/11/10 00:00

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1012560-30	6"OUT,0"-1/2",EAST,11/13 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-31	6"OUT,1/2"-1"EAST,11/13 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-32	12"OUT,0"-1/2",EAST,11/13 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-33	12"OUT,1/2"-1",EAST,11/13 SPAN	COLLINSVILLE, CT	08/11/10 00:00
L1012560-34	EQUIPMENT BLANK-START	COLLINSVILLE, CT	08/11/10 00:00
L1012560-35	EQUIPMENT BLANK-FINISH	COLLINSVILLE, CT	08/11/10 00:00
L1012560-36	DUPLICATE A	COLLINSVILLE, CT	08/11/10 00:00
L1012560-37	DUPLICATE B	COLLINSVILLE, CT	08/11/10 00:00

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Sample Receipt

The samples were received in inappropriate containers for the PCB analysis.

PCB

L1012560-02, -12 and -13 have elevated detection limits due to the dilutions required by matrix interferences encountered during the concentration of the samples.

The surrogate recoveries for L1012560-12 and -13 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene and Decachlorobiphenyl (All at 0%) due to the dilutions required to quantitate the samples. Re-extraction is not required; therefore, the results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 08/19/10

ORGANICS

PCBS

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID:	L1012560-01	Date Collected:	08/11/10 00:00
Client ID:	1"OUT,0"-1/2,"EAST 3/5 SPAN	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:47
Analytical Date:	08/19/10 07:56	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
Percent Solids:	97%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	60.4	--	1
Aroclor 1221	ND		ug/kg	60.4	--	1
Aroclor 1232	ND		ug/kg	60.4	--	1
Aroclor 1242	ND		ug/kg	60.4	--	1
Aroclor 1248	ND		ug/kg	40.3	--	1
Aroclor 1254	ND		ug/kg	60.4	--	1
Aroclor 1260	877		ug/kg	40.3	--	1
Aroclor 1262	ND		ug/kg	20.1	--	1
Aroclor 1268	ND		ug/kg	20.1	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	81		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID:	L1012560-02	Date Collected:	08/11/10 00:00
Client ID:	1"OUT, 1/2"-1", EAST, 3/5 SPAN	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:47
Analytical Date:	08/19/10 08:08	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
Percent Solids:	97%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	324	--	5
Aroclor 1221	ND		ug/kg	324	--	5
Aroclor 1232	ND		ug/kg	324	--	5
Aroclor 1242	ND		ug/kg	324	--	5
Aroclor 1248	ND		ug/kg	216	--	5
Aroclor 1254	ND		ug/kg	324	--	5
Aroclor 1262	ND		ug/kg	108	--	5
Aroclor 1268	ND		ug/kg	108	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	135		30-150	A
2,4,5,6-Tetrachloro-m-xylene	111		30-150	B
Decachlorobiphenyl	123		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID:	L1012560-02	Date Collected:	08/11/10 00:00
Client ID:	1"OUT, 1/2"-1", EAST, 3/5 SPAN	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:47
Analytical Date:	08/19/10 08:08	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
Percent Solids:	97%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1260	305		ug/kg	216	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	135		30-150	A
2,4,5,6-Tetrachloro-m-xylene	111		30-150	B
Decachlorobiphenyl	123		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID:	L1012560-12	Date Collected:	08/11/10 00:00
Client ID:	1"OUT,0-1/2",WEST,6/8 SPAN	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:47
Analytical Date:	08/19/10 08:20	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
Percent Solids:	99%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	590	--	10
Aroclor 1221	ND		ug/kg	590	--	10
Aroclor 1232	ND		ug/kg	590	--	10
Aroclor 1242	ND		ug/kg	590	--	10
Aroclor 1248	ND		ug/kg	393	--	10
Aroclor 1254	ND		ug/kg	590	--	10
Aroclor 1260	ND		ug/kg	393	--	10
Aroclor 1262	ND		ug/kg	196	--	10
Aroclor 1268	ND		ug/kg	196	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID:	L1012560-13	Date Collected:	08/11/10 00:00
Client ID:	1"OUT,1/2"-1",WEST,6/8 SPAN	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:47
Analytical Date:	08/19/10 08:32	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
Percent Solids:	98%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	571	--	10
Aroclor 1221	ND		ug/kg	571	--	10
Aroclor 1232	ND		ug/kg	571	--	10
Aroclor 1242	ND		ug/kg	571	--	10
Aroclor 1248	ND		ug/kg	381	--	10
Aroclor 1254	ND		ug/kg	571	--	10
Aroclor 1260	ND		ug/kg	381	--	10
Aroclor 1262	ND		ug/kg	190	--	10
Aroclor 1268	ND		ug/kg	190	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID:	L1012560-23	Date Collected:	08/11/10 00:00
Client ID:	1"OUT,0"-1/2", WEST,11/13 SPAN	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:47
Analytical Date:	08/19/10 08:45	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
Percent Solids:	99%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	54.9	--	1
Aroclor 1221	ND		ug/kg	54.9	--	1
Aroclor 1232	ND		ug/kg	54.9	--	1
Aroclor 1242	ND		ug/kg	54.9	--	1
Aroclor 1248	ND		ug/kg	36.6	--	1
Aroclor 1254	ND		ug/kg	54.9	--	1
Aroclor 1260	905		ug/kg	36.6	--	1
Aroclor 1262	ND		ug/kg	18.3	--	1
Aroclor 1268	ND		ug/kg	18.3	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	98		30-150	B
Decachlorobiphenyl	96		30-150	B

Project Name: NEPAUG DAM
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SAMPLE RESULTS

Lab ID:	L1012560-24	Date Collected:	08/11/10 00:00
Client ID:	1"OUT,1/2"-1",EAST, 11/13 SPAN	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:47
Analytical Date:	08/19/10 08:57	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
Percent Solids:	97%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	59.5	--	1
Aroclor 1221	ND		ug/kg	59.5	--	1
Aroclor 1232	ND		ug/kg	59.5	--	1
Aroclor 1242	ND		ug/kg	59.5	--	1
Aroclor 1248	ND		ug/kg	39.6	--	1
Aroclor 1254	ND		ug/kg	59.5	--	1
Aroclor 1260	56.3		ug/kg	39.6	--	1
Aroclor 1262	ND		ug/kg	19.8	--	1
Aroclor 1268	ND		ug/kg	19.8	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
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Report Date: 08/19/10

SAMPLE RESULTS

Lab ID:	L1012560-34	Date Collected:	08/11/10 00:00
Client ID:	EQUIPMENT BLANK-START	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Wipe	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:49
Analytical Date:	08/19/10 09:14	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug Abs	0.300	--	1
Aroclor 1221	ND		ug Abs	0.300	--	1
Aroclor 1232	ND		ug Abs	0.300	--	1
Aroclor 1242	ND		ug Abs	0.300	--	1
Aroclor 1248	ND		ug Abs	0.200	--	1
Aroclor 1254	ND		ug Abs	0.300	--	1
Aroclor 1260	ND		ug Abs	0.200	--	1
Aroclor 1262	ND		ug Abs	0.100	--	1
Aroclor 1268	ND		ug Abs	0.100	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	47		30-150	A
Decachlorobiphenyl	43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	41		30-150	B
Decachlorobiphenyl	36		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
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SAMPLE RESULTS

Lab ID:	L1012560-35	Date Collected:	08/11/10 00:00
Client ID:	EQUIPMENT BLANK-FINISH	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Wipe	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:49
Analytical Date:	08/19/10 09:27	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug Abs	0.300	--	1
Aroclor 1221	ND		ug Abs	0.300	--	1
Aroclor 1232	ND		ug Abs	0.300	--	1
Aroclor 1242	ND		ug Abs	0.300	--	1
Aroclor 1248	ND		ug Abs	0.200	--	1
Aroclor 1254	ND		ug Abs	0.300	--	1
Aroclor 1260	ND		ug Abs	0.200	--	1
Aroclor 1262	ND		ug Abs	0.100	--	1
Aroclor 1268	ND		ug Abs	0.100	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	42		30-150	A
Decachlorobiphenyl	39		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	43		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID:	L1012560-36	Date Collected:	08/11/10 00:00
Client ID:	DUPLICATE A	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:47
Analytical Date:	08/19/10 09:09	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
Percent Solids:	97%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	89.4	--	1
Aroclor 1221	ND		ug/kg	89.4	--	1
Aroclor 1232	ND		ug/kg	89.4	--	1
Aroclor 1242	ND		ug/kg	89.4	--	1
Aroclor 1248	ND		ug/kg	59.6	--	1
Aroclor 1254	ND		ug/kg	89.4	--	1
Aroclor 1260	267		ug/kg	59.6	--	1
Aroclor 1262	ND		ug/kg	29.8	--	1
Aroclor 1268	ND		ug/kg	29.8	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID:	L1012560-37	Date Collected:	08/11/10 00:00
Client ID:	DUPLICATE B	Date Received:	08/13/10
Sample Location:	COLLINSVILLE, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	1,8082	Extraction Date:	08/17/10 16:47
Analytical Date:	08/19/10 09:21	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	08/19/10
Percent Solids:	98%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	08/19/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	58.4	--	1
Aroclor 1221	ND		ug/kg	58.4	--	1
Aroclor 1232	ND		ug/kg	58.4	--	1
Aroclor 1242	ND		ug/kg	58.4	--	1
Aroclor 1248	ND		ug/kg	38.9	--	1
Aroclor 1254	ND		ug/kg	58.4	--	1
Aroclor 1260	624		ug/kg	38.9	--	1
Aroclor 1262	ND		ug/kg	19.5	--	1
Aroclor 1268	ND		ug/kg	19.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	104		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1012560
Report Date: 08/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 08/19/10 09:47
Analyst: KB

Extraction Method: EPA 3540C
Extraction Date: 08/17/10 16:47
Cleanup Method1: EPA 3665A
Cleanup Date1: 08/19/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 08/19/10

Parameter	Result	Qualifier	Units	RL	MDL
PCB by GC - Westborough Lab for sample(s): 01-02,12-13,23-24,36-37 Batch: WG428064-1					
Aroclor 1016	ND		ug/kg	59.8	--
Aroclor 1221	ND		ug/kg	59.8	--
Aroclor 1232	ND		ug/kg	59.8	--
Aroclor 1242	ND		ug/kg	59.8	--
Aroclor 1248	ND		ug/kg	39.8	--
Aroclor 1254	ND		ug/kg	59.8	--
Aroclor 1260	ND		ug/kg	39.8	--
Aroclor 1262	ND		ug/kg	19.9	--
Aroclor 1268	ND		ug/kg	19.9	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	126		30-150	A
Decachlorobiphenyl	129		30-150	A
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1012560
Report Date: 08/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082
Analytical Date: 08/19/10 10:12
Analyst: KB

Extraction Method: EPA 3540C
Extraction Date: 08/17/10 16:49
Cleanup Method1: EPA 3665A
Cleanup Date1: 08/19/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 08/19/10

Parameter	Result	Qualifier	Units	RL	MDL
PCB by GC - Westborough Lab for sample(s): 34-35 Batch: WG428066-1					
Aroclor 1016	ND		ug Abs	0.300	--
Aroclor 1221	ND		ug Abs	0.300	--
Aroclor 1232	ND		ug Abs	0.300	--
Aroclor 1242	ND		ug Abs	0.300	--
Aroclor 1248	ND		ug Abs	0.200	--
Aroclor 1254	ND		ug Abs	0.300	--
Aroclor 1260	ND		ug Abs	0.200	--
Aroclor 1262	ND		ug Abs	0.100	--
Aroclor 1268	ND		ug Abs	0.100	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	89		30-150
Decachlorobiphenyl	81		30-150
2,4,5,6-Tetrachloro-m-xylene	94		30-150
Decachlorobiphenyl	90		30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: NEPAUG DAM

Project Number: 19395.60

Lab Number: L1012560

Report Date: 08/19/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB by GC - Westborough Lab Associated sample(s): 01-02,12-13,23-24,36-37 Batch: WG428064-2 WG428064-3								
Aroclor 1016	120		116		40-140	3		50
Aroclor 1260	109		122		40-140	11		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	104		107		30-150	A
Decachlorobiphenyl	116		120		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		88		30-150	B
Decachlorobiphenyl	99		101		30-150	B

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB by GC - Westborough Lab Associated sample(s): 34-35 Batch: WG428066-2 WG428066-3								
Aroclor 1016	89		98		40-140	10		50
Aroclor 1260	83		83		40-140	1		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	91		83		30-150
Decachlorobiphenyl	94		82		30-150
2,4,5,6-Tetrachloro-m-xylene	97		104		30-150
Decachlorobiphenyl	103		107		30-150

INORGANICS
&
MISCELLANEOUS

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID: L1012560-01
Client ID: 1"OUT,0"-1/2,"EAST 3/5 SPAN
Sample Location: COLLINSVILLE, CT
Matrix: Solid

Date Collected: 08/11/10 00:00
Date Received: 08/13/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	97		%	0.10	NA	1	-	08/17/10 15:10	30,2540G	AW

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID: L1012560-02
Client ID: 1"OUT, 1/2"-1", EAST, 3/5 SPAN
Sample Location: COLLINSVILLE, CT
Matrix: Solid

Date Collected: 08/11/10 00:00
Date Received: 08/13/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	97		%	0.10	NA	1	-	08/17/10 15:10	30,2540G	AW

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID: L1012560-12
Client ID: 1"OUT,0-1/2",WEST,6/8 SPAN
Sample Location: COLLINSVILLE, CT
Matrix: Solid
Date Collected: 08/11/10 00:00
Date Received: 08/13/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	99		%	0.10	NA	1	-	08/17/10 15:10	30,2540G	AW

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID: L1012560-13
Client ID: 1"OUT,1/2"-1",WEST,6/8 SPAN
Sample Location: COLLINSVILLE, CT
Matrix: Solid

Date Collected: 08/11/10 00:00
Date Received: 08/13/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	98		%	0.10	NA	1	-	08/17/10 15:10	30,2540G	AW

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID: L1012560-23
Client ID: 1"OUT,0"-1/2", WEST,11/13 SPAN
Sample Location: COLLINSVILLE, CT
Matrix: Solid

Date Collected: 08/11/10 00:00
Date Received: 08/13/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	99		%	0.10	NA	1	-	08/17/10 15:10	30,2540G	AW

Project Name: NEPAUG DAM
Project Number: 19395.60
Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID: L1012560-24
Client ID: 1"OUT,1/2"-1",EAST, 11/13 SPAN
Sample Location: COLLINSVILLE, CT
Matrix: Solid

Date Collected: 08/11/10 00:00
Date Received: 08/13/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	97		%	0.10	NA	1	-	08/17/10 15:10	30,2540G	AW

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID: L1012560-36
Client ID: DUPLICATE A
Sample Location: COLLINSVILLE, CT
Matrix: Solid

Date Collected: 08/11/10 00:00
Date Received: 08/13/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	97		%	0.10	NA	1	-	08/17/10 15:10	30,2540G	AW

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1012560
Report Date: 08/19/10

SAMPLE RESULTS

Lab ID: L1012560-37
Client ID: DUPLICATE B
Sample Location: COLLINSVILLE, CT
Matrix: Solid

Date Collected: 08/11/10 00:00
Date Received: 08/13/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	98		%	0.10	NA	1	-	08/17/10 15:10	30,2540G	AW

Lab Duplicate Analysis
Batch Quality Control

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1012560
Report Date: 08/19/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,12-13,23-24,36-37 QC Batch ID: WG428033-1 QC Sample: L1012560-23 Client ID: 1"OUT,0"-1/2", WEST,11/13 SPAN						
Solids, Total	99	99	%	0		20

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1012560
Report Date: 08/19/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1012560-01A	Bag	A	N/A	6	Y	Absent	TS(7),PCB-8082LL()
L1012560-02A	Bag	A	N/A	6	Y	Absent	TS(7),PCB-8082LL()
L1012560-03A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-04A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-05A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-06A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-07A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-08A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-09A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-10A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-11A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-12A	Bag	A	N/A	6	Y	Absent	TS(7),PCB-8082LL()
L1012560-13A	Bag	A	N/A	6	Y	Absent	TS(7),PCB-8082LL()
L1012560-14A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-15A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-16A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-17A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-18A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-19A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-20A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-21A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-22A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-23A	Bag	A	N/A	6	Y	Absent	TS(7),PCB-8082LL()
L1012560-24A	Bag	A	N/A	6	Y	Absent	TS(7),PCB-8082LL()
L1012560-25A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-26A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-27A	Bag	A	N/A	6	Y	Absent	HOLD(14)

*Values in parentheses indicate holding time in days

Project Name: NEPAUG DAM
Project Number: 19395.60

Lab Number: L1012560
Report Date: 08/19/10

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1012560-28A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-29A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-30A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-31A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-32A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-33A	Bag	A	N/A	6	Y	Absent	HOLD(14)
L1012560-34A	Bag	A	N/A	6	Y	Absent	PCB-8082LL()
L1012560-35A	Bag	A	N/A	6	Y	Absent	PCB-8082LL()
L1012560-36A	Bag	A	N/A	6	Y	Absent	TS(7),PCB-8082LL()
L1012560-37A	Bag	A	N/A	6	Y	Absent	TS(7),PCB-8082LL()

*Values in parentheses indicate holding time in days

Project Name:	NEPAUG DAM	**Lab Number:**	L1012560
Project Number:	19395.60	**Report Date:**	08/19/10

GLOSSARY

Acronyms

EPA · Environmental Protection Agency.

LCS · Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD · Laboratory Control Sample Duplicate: Refer to LCS.

MDL · Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS · Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD · Matrix Spike Sample Duplicate: Refer to MS.

NA · Not Applicable.

NC · Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI · Not Ignitable.

RL · Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD · Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

Report Format: Data Usability Report

Project Name:	NEPAUG DAM	**Lab Number:**	L1012560
Project Number:	19395.60	**Report Date:**	08/19/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	NEPAUG DAM	**Lab Number:**	L1012560
Project Number:	19395.60	**Report Date:**	08/19/10

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)
Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)
*Solid Waste/Soil (*Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.
Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D
Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)
Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A , 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

CHAIN OF CUSTODY

PAGE 1 OF 4

Date Rec'd in Lab: 8/13/10

ALPHA Job #: L1012560

ALPHA ANALYTICAL

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Serial_No:08191016:52

Client Information

Client: GZA

Address: 1 Edgewater Dr, Norwood MA 02062

Phone: 781-278-5766

Fax:

Email: dleone@gza.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Nepaug Dam

Project Location: Collinsville, CT

Project #: 19395.60

Project Manager: Dave E. Leone

ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL

☑ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #: 19395.60

Regulatory Requirements/Report Limits

State /Fed Program: "TSCA 4)" Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☐ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

timothy.downey@gza.com

ANALYSIS: PCBs - 8082

SAMPLE HANDLING

Filtration
☐ Done
☐ Not needed
☐ Lab to do

Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCBs - 8082	Sample Specific Comments	TOTAL # BOTTLES
12560-01	1" out, 0"-½", East, 3/15 span 8/11			X1	TMD	X	At bulkhead	1
-02	1" out, ½"-1", East, 3/15 span							
-03 *	1" out, 1"-1½", East, 3/15 span						* Hold samples in 3/15 span. Call GZA w/ results of 1st 2 samples in group, 1st.	
-04	1" out, 1½"-2", East 3/15 span							
-05	3" out, 0"-½", East, 3/15 span							
-06	3" out, ½"-1", East, 3/15 span							
-07	3" out, 1"-1½", East, 3/15 span							
-08	6" out, 0"-½", East 3/15 span							
-09	6" out, ½"-1", East, 3/15 span							
-10	12" out, 0"-½", East 3/15 span							

Container Type	P									
Preservative	A									

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	8/12/10		8/13/10 1230
	8/13/10 1320		8/13/10 1320

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 18-Jan-2010)

CHAIN OF CUSTODY

PAGE 2 OF 4

Date Rec'd in Lab: 8/13/10

ALPHA Job #: L1012560

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Serial No:08191016:52

Client Information

Client: GZA

Address: 1 Edgewater Dr. Norwood, MA 02062

Phone: 781-278-5766

Fax:

Email: dleone@gza.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Nepaug Dam

Project Location: Collinsville, CT

Project #: 19395.60

Project Manager: Dave E. Leone

ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL

☑ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #: 19395.60

Regulatory Requirements/Report Limits

State /Fed Program: EPA TSCA Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☐ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required , indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All ***CAM*** methods for inorganic analyses require MS every 20 soil samples)

timothy.downey@gza.com

ANALYSIS: PCBs-8082

SAMPLE HANDLING

Filtration
☐ Done
☑ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Sample Specific Comments	TOTAL # BOTTLES
12560-11	2" out 1/2"-1", East 3/5 span	8/11/10		X1	TMD	At buttress	1
-12	1" out, 0"-1/2", West, 6/8 span						
-13	1" out, 1/2"-1", west, 6/8 span						
-14*	1" out, 1"-1 1/2", West, 6/8 span						
-15	1" out, 1 1/2"-2" west, 6/8 span						
-16	3" out, 0"-1/2", west, 6/8 span						
-17	3" out, 1/2"-1", west, 6/8 span						
-18	3" out, 1"-1 1/2" West, 6/8 span						
-19	6" out, 0"-1/2", West, 6/8 span						
-20	6" out, 1/2"-1", West 6/8 span						

* Hold samples in 6/8 group - call GZA w/ results of 1st 2 samples in group, 1st

Container Type	P
Preservative	A

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	8/12/10 1320		8/13/10 1230
	8/13/10		8/13/10 1320

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 18-Jan-2010)

Serial_No:08191016:52

CHAIN OF CUSTODY

PAGE 3 OF 4

Date Rec'd in Lab: 8/13/10

ALPHA Job #: L1012560

ALPHA ANALYTICAL

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: GZA

Address: 1 Edgewater Dr, Norwood, MA 02062

Phone: 781-278-5746

Fax:

Email: dleone@gza.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Nepaug Dam

Project Location: Collinsville, CT

Project #: 19395.60

Project Manager: Dave E. Leone

ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☑ EMAIL

☑ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #: 19395.60

Regulatory Requirements/Report Limits

State /Fed Program: EPA ISA Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO-

☐ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

timothy.downey@gza.com

ANALYSIS: PCBs-8082

SAMPLE HANDLING

Filtration
☐ Done
☑ Not needed
☐ Lab to do

Preservation
☐ Lab to do

(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Sample Specific Comments	TOTAL # BOTTLES
10560-21	12" out, 0"-1/2", West, 6/8 span	8/11/10		X1	TMD	At buttress	1
-22	12" out, 1/2"-1", West 6/8 span						
-23	1" out, 0"-1/2", West, 11/13 span					* Hold samples in 11/13 span. Call GZA w/ results of 1st 2 samples in group, 1st	
-24	1" out, 1/2"-1", East, 11/13 span						
-25*	1" out, 1"-1 1/2", East, 11/13 span						
-26	1" out 1 1/2"-2", East, 11/13 span						
-27	3" out, 0"-1/2", East 11/13 span						
-28	3" out, 1/2"-1", East, 11/13 span						
-29	3" out, 1"-1 1/2", East, 11/13 span						
-30	6" out, 0"-1/2", East, 11/13 span						

Container Type	P
Preservative	A

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	8/12/10		8/13/10 1230
	8/13/10 1320		8/13/10 1320

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

CHAIN OF CUSTODY

PAGE 4 OF 4

Date Rec'd in Lab: 8/13/10

ALPHA Job #: L1012560

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Serial No:08191016:52

Client Information

Client: GZA
Address: 1 Edgewater Dr. Norwood, MA 02062
Phone: 781-278-5766
Fax:
Email: releone@gza.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Nepaug Dam
Project Location: Collinsville, CT
Project #: 19395.60
Project Manager: Dave E. Leone
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Other Project Specific Requirements/Comments/Detection Limits:
timothy.dewey@gza.com

Report Information - Data Deliverables

☐ FAX ☑ EMAIL
☑ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #: 19395.60

Regulatory Requirements/Report Limits

State /Fed Program: EPA TSCA
Criteria:

MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS: PCBs-8082

SAMPLE HANDLING
Filtration
☐ Done
☑ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCBs-8082	Sample Specific Comments	TOTAL # BOTTLES
12560-31	6" out, 1/2" - 1", East 11/13 span	8/11/10		X	TMD	X		
-32	12" out, 0" - 1/2", East, 11/13 span							
-33	12" out, 1/2" - 1", East, 11/13 span							
-34	* Equipment Blank-Start						* - Analyze both Eq & duplicate samples, regardless.	
-35	Equipment Blank-Finish							
-36	Duplicate A							
-37	Duplicate B							

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type	P
Preservative	a

Relinquished By:	Date/Time	Received By:	Date/Time
	8/12/10		8/13/10 1230
	8/13/10 1320		8/13/10 1320

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

ANALYTICAL REPORT

Lab Number:	L1016640
Client:	GZA GeoEnvironmental, Inc. 1 Edgewater Drive Norwood, MA 02062
ATTN:	Dave E. Leone
Phone:	(781) 278-5766
Project Name:	MDC-NEPAUG DAM
Project Number:	01.0019395
Report Date:	10/28/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1016640
Report Date: 10/28/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1016640-01	3/5 BUTTRESS 1" OUT(0-1/2)	NEW HARTFORD, CT	10/20/10 00:00
L1016640-02	3/5 BUTTRESS 1" OUT(1/2-1)	NEW HARTFORD, CT	10/20/10 00:00
L1016640-03	6/8 BUTTRESS 1" OUT(0-1/2)	NEW HARTFORD, CT	10/20/10 00:00
L1016640-04	6/8 BUTTRESS 1" OUT(1/2-1)	NEW HARTFORD, CT	10/20/10 00:00
L1016640-05	DUPLICATE-A	NEW HARTFORD, CT	10/20/10 00:00
L1016640-06	DUPLICATE-B	NEW HARTFORD, CT	10/20/10 00:00
L1016640-07	EB-PRE	NEW HARTFORD, CT	10/20/10 00:00
L1016640-08	EB-MID	NEW HARTFORD, CT	10/20/10 00:00
L1016640-09	EB-POST	NEW HARTFORD, CT	10/20/10 00:00

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1016640
Report Date: 10/28/10

CT DEP Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents)?	YES
1a	Were the method specified preservation and holding time requirements met?	YES
1b	VPH & EPH Methods Only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4°C ± 2°)?	YES
4	Were all QA/QC performance criteria specified in the CT DEP Reasonable Confidence Protocol documents achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody?	YES
5b	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	YES
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	NO

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or question B is "No", the data package does not meet the requirements for "Reasonable Confidence".

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1016640
Report Date: 10/28/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

RCP Related Narratives

PCB

L1016640-01 has elevated detection limits due to the dilution required by the matrix interferences encountered during the concentration of the sample and the analytical dilution required by the elevated concentrations of target compounds in the sample.

L1016640-02, -03, -05, and -06 have elevated detection limits due to the dilutions required by matrix interferences encountered during the concentration of the samples.

In reference to question 4:

The surrogate recoveries for L1016640-01 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene and Decachlorobiphenyl (all at 0%) due to the dilution required to quantitate the sample. Re-extraction is not required; therefore, the results of the original analysis are reported.

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1016640
Project Number:	01.0019395	**Report Date:**	10/28/10

Case Narrative (continued)

The WG438984-2/-3 LCS/LCSD RPD associated with L1016640-01 through -06 is above the acceptance criteria for Aroclor 1016 (52%); however, the individual LCS/LCSD recoveries are within method limits.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Kelly Stenstrom

Title: Technical Director/Representative Date: 10/28/10

ORGANICS

PCBS

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID:	L1016640-01 D	Date Collected:	10/20/10 00:00
Client ID:	3/5 BUTTRESS 1" OUT(0-1/2)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	10/22/10 21:30
Analytical Date:	10/26/10 18:06	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	10/25/10
Percent Solids:	96%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	10/25/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	2350	--	40
Aroclor 1221	ND		ug/kg	2350	--	40
Aroclor 1232	ND		ug/kg	2350	--	40
Aroclor 1242	ND		ug/kg	2350	--	40
Aroclor 1248	ND		ug/kg	1570	--	40
Aroclor 1254	ND		ug/kg	2350	--	40
Aroclor 1260	21900		ug/kg	1570	--	40
Aroclor 1262	ND		ug/kg	783	--	40
Aroclor 1268	ND		ug/kg	783	--	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150
Decachlorobiphenyl	**0**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150
Decachlorobiphenyl	**0**	Q	30-150

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID:	L1016640-02	Date Collected:	10/20/10 00:00
Client ID:	3/5 BUTTRESS 1" OUT(1/2-1)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	10/22/10 21:30
Analytical Date:	10/26/10 18:20	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	10/25/10
Percent Solids:	96%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	10/25/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	409	--	7
Aroclor 1221	ND		ug/kg	409	--	7
Aroclor 1232	ND		ug/kg	409	--	7
Aroclor 1242	ND		ug/kg	409	--	7
Aroclor 1248	ND		ug/kg	272	--	7
Aroclor 1254	ND		ug/kg	409	--	7
Aroclor 1260	ND		ug/kg	272	--	7
Aroclor 1262	ND		ug/kg	136	--	7
Aroclor 1268	ND		ug/kg	136	--	7

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	74		30-150
Decachlorobiphenyl	76		30-150
2,4,5,6-Tetrachloro-m-xylene	73		30-150
Decachlorobiphenyl	91		30-150

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID:	L1016640-03	Date Collected:	10/20/10 00:00
Client ID:	6/8 BUTTRESS 1" OUT(0-1/2)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	10/22/10 21:30
Analytical Date:	10/26/10 18:35	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	10/25/10
Percent Solids:	96%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	10/25/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	290	--	5
Aroclor 1221	ND		ug/kg	290	--	5
Aroclor 1232	ND		ug/kg	290	--	5
Aroclor 1242	ND		ug/kg	290	--	5
Aroclor 1248	ND		ug/kg	194	--	5
Aroclor 1254	ND		ug/kg	290	--	5
Aroclor 1260	2300		ug/kg	194	--	5
Aroclor 1262	ND		ug/kg	96.8	--	5
Aroclor 1268	ND		ug/kg	96.8	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	55		30-150
Decachlorobiphenyl	39		30-150
2,4,5,6-Tetrachloro-m-xylene	61		30-150
Decachlorobiphenyl	41		30-150

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID:	L1016640-04	Date Collected:	10/20/10 00:00
Client ID:	6/8 BUTTRESS 1" OUT(1/2-1)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	10/22/10 21:30
Analytical Date:	10/26/10 18:49	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	10/25/10
Percent Solids:	95%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	10/25/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	57.1	--	1
Aroclor 1221	ND		ug/kg	57.1	--	1
Aroclor 1232	ND		ug/kg	57.1	--	1
Aroclor 1242	ND		ug/kg	57.1	--	1
Aroclor 1248	ND		ug/kg	38.1	--	1
Aroclor 1254	ND		ug/kg	57.1	--	1
Aroclor 1260	672		ug/kg	38.1	--	1
Aroclor 1262	ND		ug/kg	19.0	--	1
Aroclor 1268	ND		ug/kg	19.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	79		30-150
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	78		30-150

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID:	L1016640-05	Date Collected:	10/20/10 00:00
Client ID:	DUPLICATE-A	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	10/22/10 21:30
Analytical Date:	10/26/10 19:04	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	10/25/10
Percent Solids:	97%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	10/25/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	342	--	6
Aroclor 1221	ND		ug/kg	342	--	6
Aroclor 1232	ND		ug/kg	342	--	6
Aroclor 1242	ND		ug/kg	342	--	6
Aroclor 1248	ND		ug/kg	228	--	6
Aroclor 1254	ND		ug/kg	342	--	6
Aroclor 1260	4530		ug/kg	228	--	6
Aroclor 1262	ND		ug/kg	114	--	6
Aroclor 1268	ND		ug/kg	114	--	6

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	85		30-150
Decachlorobiphenyl	88		30-150
2,4,5,6-Tetrachloro-m-xylene	110		30-150
Decachlorobiphenyl	85		30-150

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID:	L1016640-06	Date Collected:	10/20/10 00:00
Client ID:	DUPLICATE-B	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	10/22/10 21:30
Analytical Date:	10/26/10 10:48	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	10/25/10
Percent Solids:	96%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	10/25/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	465	--	8
Aroclor 1221	ND		ug/kg	465	--	8
Aroclor 1232	ND		ug/kg	465	--	8
Aroclor 1242	ND		ug/kg	465	--	8
Aroclor 1248	ND		ug/kg	310	--	8
Aroclor 1254	ND		ug/kg	465	--	8
Aroclor 1260	ND		ug/kg	310	--	8
Aroclor 1262	ND		ug/kg	155	--	8
Aroclor 1268	ND		ug/kg	155	--	8

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
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SAMPLE RESULTS

Lab ID:	L1016640-07	Date Collected:	10/20/10 00:00
Client ID:	EB-PRE	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Wipe	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	10/22/10 21:30
Analytical Date:	10/27/10 16:11	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	10/26/10
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	10/27/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug Abs	0.300	--	1
Aroclor 1221	ND		ug Abs	0.300	--	1
Aroclor 1232	ND		ug Abs	0.300	--	1
Aroclor 1242	ND		ug Abs	0.300	--	1
Aroclor 1248	ND		ug Abs	0.200	--	1
Aroclor 1254	ND		ug Abs	0.300	--	1
Aroclor 1260	ND		ug Abs	0.200	--	1
Aroclor 1262	ND		ug Abs	0.100	--	1
Aroclor 1268	ND		ug Abs	0.100	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	109		30-150	B
Decachlorobiphenyl	108		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID:	L1016640-08	Date Collected:	10/20/10 00:00
Client ID:	EB-MID	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Wipe	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	10/22/10 21:30
Analytical Date:	10/27/10 16:25	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	10/26/10
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	10/27/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug Abs	0.300	--	1
Aroclor 1221	ND		ug Abs	0.300	--	1
Aroclor 1232	ND		ug Abs	0.300	--	1
Aroclor 1242	ND		ug Abs	0.300	--	1
Aroclor 1248	ND		ug Abs	0.200	--	1
Aroclor 1254	ND		ug Abs	0.300	--	1
Aroclor 1260	ND		ug Abs	0.200	--	1
Aroclor 1262	ND		ug Abs	0.100	--	1
Aroclor 1268	ND		ug Abs	0.100	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	99		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID:	L1016640-09	Date Collected:	10/20/10 00:00
Client ID:	EB-POST	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Wipe	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	10/22/10 21:30
Analytical Date:	10/27/10 16:40	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	10/26/10
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	10/27/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug Abs	0.300	--	1
Aroclor 1221	ND		ug Abs	0.300	--	1
Aroclor 1232	ND		ug Abs	0.300	--	1
Aroclor 1242	ND		ug Abs	0.300	--	1
Aroclor 1248	ND		ug Abs	0.200	--	1
Aroclor 1254	ND		ug Abs	0.300	--	1
Aroclor 1260	ND		ug Abs	0.200	--	1
Aroclor 1262	ND		ug Abs	0.100	--	1
Aroclor 1268	ND		ug Abs	0.100	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1016640
Report Date: 10/28/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 77,8082
Analytical Date: 10/26/10 07:20
Analyst: KB

Extraction Method: EPA 3540C
Extraction Date: 10/22/10 21:30
Cleanup Method1: EPA 3665A
Cleanup Date1: 10/25/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 10/25/10

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01-06 Batch: WG438984-1					
Aroclor 1016	ND		ug/kg	60.0	--
Aroclor 1221	ND		ug/kg	60.0	--
Aroclor 1232	ND		ug/kg	60.0	--
Aroclor 1242	ND		ug/kg	60.0	--
Aroclor 1248	ND		ug/kg	40.0	--
Aroclor 1254	ND		ug/kg	60.0	--
Aroclor 1260	ND		ug/kg	40.0	--
Aroclor 1262	ND		ug/kg	20.0	--
Aroclor 1268	ND		ug/kg	20.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1016640
Report Date: 10/28/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 77,8082
Analytical Date: 10/27/10 16:54
Analyst: KB

Extraction Method: EPA 3540C
Extraction Date: 10/22/10 21:30
Cleanup Method1: EPA 3665A
Cleanup Date1: 10/26/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 10/27/10

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 07-09 Batch: WG438986-1					
Aroclor 1016	ND		ug Abs	0.300	--
Aroclor 1221	ND		ug Abs	0.300	--
Aroclor 1232	ND		ug Abs	0.300	--
Aroclor 1242	ND		ug Abs	0.300	--
Aroclor 1248	ND		ug Abs	0.200	--
Aroclor 1254	ND		ug Abs	0.300	--
Aroclor 1260	ND		ug Abs	0.200	--
Aroclor 1262	ND		ug Abs	0.100	--
Aroclor 1268	ND		ug Abs	0.100	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	111		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MDC-NEPAUG DAM

Project Number: 01.0019395

Lab Number: L1016640

Report Date: 10/28/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01-06 Batch: WG438984-2 WG438984-3								
Aroclor 1016	135		79		40-140	**52**	Q	50
Aroclor 1260	101		75		40-140	30		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	117		79		30-150	A
Decachlorobiphenyl	100		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		69		30-150	B
Decachlorobiphenyl	62		64		30-150	B

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 07-09 Batch: WG438986-2 WG438986-3								
Aroclor 1016	76		96		40-140	23		50
Aroclor 1260	76		96		40-140	23		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		83		30-150	A
Decachlorobiphenyl	74		98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		106		30-150	B
Decachlorobiphenyl	88		110		30-150	B

INORGANICS
&
MISCELLANEOUS

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID: L1016640-01
Client ID: 3/5 BUTTRESS 1" OUT(0-1/2)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96		%	0.10	NA	1	-	10/26/10 10:52	30,2540G	PR

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID: L1016640-02
Client ID: 3/5 BUTTRESS 1" OUT(1/2-1)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96		%	0.10	NA	1	-	10/26/10 10:52	30,2540G	PR

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID: L1016640-03
Client ID: 6/8 BUTTRESS 1" OUT(0-1/2)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96		%	0.10	NA	1	-	10/26/10 10:52	30,2540G	PR

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID: L1016640-04
Client ID: 6/8 BUTTRESS 1" OUT(1/2-1)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95		%	0.10	NA	1	-	10/26/10 10:52	30,2540G	PR

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID: L1016640-05
Client ID: DUPLICATE-A
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	97		%	0.10	NA	1	-	10/26/10 10:52	30,2540G	PR

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1016640
Report Date: 10/28/10

SAMPLE RESULTS

Lab ID: L1016640-06
Client ID: DUPLICATE-B
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96		%	0.10	NA	1	-	10/26/10 10:52	30,2540G	PR

Lab Duplicate Analysis
Batch Quality Control

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1016640
Report Date: 10/28/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG439424-1 QC Sample: L1016698-01 Client ID: DUP Sample						
Solids, Total	35	35	%	0		20

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1016640
Report Date: 10/28/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1016640-01A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1016640-02A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1016640-03A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1016640-04A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1016640-05A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1016640-06A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1016640-07A	Amber 100ml unpreserved	A	N/A	2	Y	Absent	CT-8082LL-3540C(14)
L1016640-08A	Amber 100ml unpreserved	A	N/A	2	Y	Absent	CT-8082LL-3540C(14)
L1016640-09A	Amber 100ml unpreserved	A	N/A	2	Y	Absent	CT-8082LL-3540C(14)

*Values in parentheses indicate holding time in days

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1016640
Project Number:	01.0019395	**Report Date:**	10/28/10

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

Report Format: Data Usability Report

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1016640
Project Number:	01.0019395	**Report Date:**	10/28/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1016640
Project Number:	01.0019395	**Report Date:**	10/28/10

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

77 Connecticut DEP Quality Assurance and Quality Control Requirements for SW-846 Methods. CTDEP Reasonable Confidence Protocols (RCPs). Version 1.0, July 2005.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)
Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)
*Solid Waste/Soil (*Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.
Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D
Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)
Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A , 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Lab Returns to Proj. Mgr. GOLDENROD COPY - Proj. Mgr. Keeps

CHAIN-OF-CUSTODY RECORD ALPHA Job # L1016640

W.O. # _____ *(for lab use only)*

Sample I.D.	Date/Time Sampled (Very Important)	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., Other (specify))	WW ONLY: 624	WW ONLY: ☐ 601 ☐ 602	WW ONLY: 625	ANALYSIS REQUIRED: ☐ 524.2 ☐ 502.1	8260	8260 - "8240" List	8021	8021 - "8010" List	8021 - "8020" List	8270 ☐ PAH ☐ A ☐ BN	8081 Pest Only	TPH-GC (Mod 8100)	ETPH (CT)	Metals ☐ PPM-13 ☐ R-8	Metals (List Below)	PCBs (Soils)	Total # of Cont.	Note #
3/5 Buttress 1"out(0-1/2)	10/20/10	Concrete																X	1	
3/5 Buttress 1"out(1/2-1)																		X	1	
6/8 Buttress 1"out(0-1/2)																		X	1	
6/8 Buttress 1"out(1/2-1)																		X	1	
Duplicate - A																		X	1	
Duplicate - B																		X	1	
EB - PRE		wipe																X	1	
EB - MID																		X	1	
EB - Post																		X	1	
PRESERVATIVE (Cl - HCl, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*																				
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*																				

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
	10/20/10 1600	10/21/10 1615
	10/21/10 1820	

NOTES: Preservatives, special reporting limits, known contamination, etc.

PCBs By Manual Soxhlet Extraction.

PROJECT MANAGER: David E. Leone EXT: 5766

GZA GeoEnvironmental, Inc.
ENGINEERS AND SCIENTISTS

One Edgewater Drive
Norwood, MA
781-278-5766

~~120 Mountain Avenue~~
~~BLOOMFIELD, CT 06002~~
~~(860) 875-7655~~
FAX (~~860~~) ~~872-2416~~

TURNAROUND TIME: (Standard) Rush___ Days, Approved by _____ LAB USE TEMP. OF COOLER_____°C

GZA FILE NO: 01.00 19395 P.O. NO. _____

PROJECT MDC - NEPAUG Dam

LOCATION NEW HARTFORD, CT

COLLECTOR(S) V. Simmons, A. Gk SHEET 1 OF 1

GZAP-031

ANALYTICAL REPORT

Lab Number:	L1017983
Client:	GZA GeoEnvironmental, Inc. 1 Edgewater Drive Norwood, MA 02062
ATTN:	Dave E. Leone
Phone:	(781) 278-5766
Project Name:	MDC-NEPAUG DAM
Project Number:	01.0019395
Report Date:	11/19/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1017983
Report Date: 11/19/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1017983-01	3/5 BUTTRESS 3-OUT (1/2-1)	NEW HARTFORD, CT	10/20/10 00:00
L1017983-02	3/5 BUTTRESS 6-OUT (0-1/2)	NEW HARTFORD, CT	10/20/10 00:00
L1017983-03	6/8 BUTRESS 3-OUT (1/2-1)	NEW HARTFORD, CT	10/20/10 00:00
L1017983-04	6/8 BUTRESS 6-OUT (0-1/2)	NEW HARTFORD, CT	10/20/10 00:00

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1017983
Report Date: 11/19/10

CT DEP Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents)?	YES
1a	Were the method specified preservation and holding time requirements met?	NO
1b	VPH & EPH Methods Only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4°C ± 2°)?	YES
4	Were all QA/QC performance criteria specified in the CT DEP Reasonable Confidence Protocol documents achieved?	YES
5a	Were reporting limits specified or referenced on the chain-of-custody?	YES
5b	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	YES
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	NO

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or question B is "No", the data package does not meet the requirements for "Reasonable Confidence".

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1017983
Report Date: 11/19/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

RCP Related Narratives

Sample Receipt

In reference to question 1A:

At the client's request, analysis of PCBs was taken off hold with the method required hold time exceeded.

PCB

L1017983-01 through -04 have elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix, and the dilutions required by matrix interferences encountered during the concentration of the samples.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Simmons

Title: Technical Director/Representative Date: 11/19/10

ORGANICS

PCBS

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1017983
Report Date: 11/19/10

SAMPLE RESULTS

Lab ID:	L1017983-01	Date Collected:	10/20/10 00:00
Client ID:	3/5 BUTTRESS 3-OUT (1/2-1)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	11/17/10 19:50
Analytical Date:	11/18/10 16:35	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	11/18/10
Percent Solids:	96%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	11/18/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	723	--	5
Aroclor 1221	ND		ug/kg	723	--	5
Aroclor 1232	ND		ug/kg	723	--	5
Aroclor 1242	ND		ug/kg	723	--	5
Aroclor 1248	ND		ug/kg	482	--	5
Aroclor 1254	ND		ug/kg	723	--	5
Aroclor 1260	ND		ug/kg	482	--	5
Aroclor 1262	ND		ug/kg	241	--	5
Aroclor 1268	ND		ug/kg	241	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	112		30-150	A
Decachlorobiphenyl	97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	107		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1017983
Report Date: 11/19/10

SAMPLE RESULTS

Lab ID:	L1017983-02	Date Collected:	10/20/10 00:00
Client ID:	3/5 BUTTRESS 6-OUT (0-1/2)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	11/17/10 19:50
Analytical Date:	11/18/10 16:47	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	11/18/10
Percent Solids:	97%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	11/18/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	998	--	5
Aroclor 1221	ND		ug/kg	998	--	5
Aroclor 1232	ND		ug/kg	998	--	5
Aroclor 1242	ND		ug/kg	998	--	5
Aroclor 1248	ND		ug/kg	665	--	5
Aroclor 1254	ND		ug/kg	998	--	5
Aroclor 1260	2180		ug/kg	665	--	5
Aroclor 1262	ND		ug/kg	332	--	5
Aroclor 1268	ND		ug/kg	332	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	103		30-150	B
Decachlorobiphenyl	81		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1017983
Report Date: 11/19/10

SAMPLE RESULTS

Lab ID:	L1017983-03	Date Collected:	10/20/10 00:00
Client ID:	6/8 BUTRESS 3-OUT (1/2-1)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	11/17/10 19:50
Analytical Date:	11/18/10 16:59	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	11/18/10
Percent Solids:	95%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	11/18/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	430	--	5
Aroclor 1221	ND		ug/kg	430	--	5
Aroclor 1232	ND		ug/kg	430	--	5
Aroclor 1242	ND		ug/kg	430	--	5
Aroclor 1248	ND		ug/kg	287	--	5
Aroclor 1254	ND		ug/kg	430	--	5
Aroclor 1260	ND		ug/kg	287	--	5
Aroclor 1262	ND		ug/kg	143	--	5
Aroclor 1268	ND		ug/kg	143	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	109		30-150	A
Decachlorobiphenyl	96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	106		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1017983
Report Date: 11/19/10

SAMPLE RESULTS

Lab ID:	L1017983-04	Date Collected:	10/20/10 00:00
Client ID:	6/8 BUTRESS 6-OUT (0-1/2)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	11/17/10 19:50
Analytical Date:	11/18/10 17:11	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	11/18/10
Percent Solids:	96%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	11/18/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	701	--	5
Aroclor 1221	ND		ug/kg	701	--	5
Aroclor 1232	ND		ug/kg	701	--	5
Aroclor 1242	ND		ug/kg	701	--	5
Aroclor 1248	ND		ug/kg	467	--	5
Aroclor 1254	ND		ug/kg	701	--	5
Aroclor 1260	1080		ug/kg	467	--	5
Aroclor 1262	ND		ug/kg	234	--	5
Aroclor 1268	ND		ug/kg	234	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	120		30-150	A
Decachlorobiphenyl	108		30-150	A
2,4,5,6-Tetrachloro-m-xylene	116		30-150	B
Decachlorobiphenyl	106		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1017983
Report Date: 11/19/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 77,8082
Analytical Date: 11/18/10 18:37
Analyst: KB

Extraction Method: EPA 3540C
Extraction Date: 11/17/10 19:50
Cleanup Method1: EPA 3665A
Cleanup Date1: 11/18/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 11/18/10

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01-04 Batch: WG443528-1					
Aroclor 1016	ND		ug/kg	60.0	--
Aroclor 1221	ND		ug/kg	60.0	--
Aroclor 1232	ND		ug/kg	60.0	--
Aroclor 1242	ND		ug/kg	60.0	--
Aroclor 1248	ND		ug/kg	40.0	--
Aroclor 1254	ND		ug/kg	60.0	--
Aroclor 1260	ND		ug/kg	40.0	--
Aroclor 1262	ND		ug/kg	20.0	--
Aroclor 1268	ND		ug/kg	20.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	60		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MDC-NEPAUG DAM

Project Number: 01.0019395

Lab Number: L1017983

Report Date: 11/19/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01-04 Batch: WG443528-2 WG443528-3								
Aroclor 1016	100		100		40-140	0		50
Aroclor 1260	90		91		40-140	1		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		76		30-150	A
Decachlorobiphenyl	73		69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		51		30-150	B
Decachlorobiphenyl	53		53		30-150	B

INORGANICS
&
MISCELLANEOUS

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1017983
Report Date: 11/19/10

SAMPLE RESULTS

Lab ID: L1017983-01
Client ID: 3/5 BUTTRESS 3-OUT (1/2-1)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96		%	0.10	NA	1	-	11/16/10 10:28	30,2540G	MO

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1017983
Report Date: 11/19/10

SAMPLE RESULTS

Lab ID: L1017983-02
Client ID: 3/5 BUTTRESS 6-OUT (0-1/2)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	97		%	0.10	NA	1	-	11/16/10 10:28	30,2540G	MO

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1017983
Report Date: 11/19/10

SAMPLE RESULTS

Lab ID: L1017983-03
Client ID: 6/8 BUTRESS 3-OUT (1/2-1)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95		%	0.10	NA	1	-	11/16/10 10:28	30,2540G	MO

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1017983
Report Date: 11/19/10

SAMPLE RESULTS

Lab ID: L1017983-04
Client ID: 6/8 BUTRESS 6-OUT (0-1/2)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96		%	0.10	NA	1	-	11/16/10 10:28	30,2540G	MO

Lab Duplicate Analysis
Batch Quality Control

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1017983
Report Date: 11/19/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG443233-1 QC Sample: L1017522-01 Client ID: DUP Sample						
Solids, Total	52	47	%	10		20

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1017983
Report Date: 11/19/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1017983-01A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1017983-02A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1017983-03A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1017983-04A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)

*Values in parentheses indicate holding time in days

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1017983
Project Number:	01.0019395	**Report Date:**	11/19/10

GLOSSARY

Acronyms

EPA · Environmental Protection Agency.

LCS · Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD · Laboratory Control Sample Duplicate: Refer to LCS.

MDL · Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS · Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD · Matrix Spike Sample Duplicate: Refer to MS.

NA · Not Applicable.

NC · Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI · Not Ignitable.

RL · Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD · Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

Report Format: Data Usability Report

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1017983
Project Number:	01.0019395	**Report Date:**	11/19/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1017983
Project Number:	01.0019395	**Report Date:**	11/19/10

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

77 Connecticut DEP Quality Assurance and Quality Control Requirements for SW-846 Methods. CTDEP Reasonable Confidence Protocols (RCPs). Version 1.0, July 2005.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)
Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)
*Solid Waste/Soil (*Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.
Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D
Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)
Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A , 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

CHAIN-OF-CUSTODY RECORD

ALPHA Job # ~~L1016644~~ 11/10/10 TF L1017983

W.O. # ________ (for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	pH / Cond.	GC Methane, Ethane, Ethene	EPA 8260	EPA 8260 – 8010 List (Chlor.)	EPA 8260 – 8021 list	EPA 8260 – 8020 List	EPA 524.2 DW VOCs	EPA 624 WW VOCs	601 / 602 WW VOCs	EPA 8270 FULL SVOCs	EPA 8270 PAH / AB/N	EPA 625 WW SVOCs	EPA 8082-PCBs	EPA 8081-Pest	TPH-GC (Mod. 8100)	TPH-GC w/FING.	EPH (MA DEP)	VPH (MA DEP)	Metals PPM-13 / R-8	MCP 14 Metals (MA)	Metals (List Below)**	TCLP – Specify Below	SPLP – Specify Below	EPA 300 Cl / SO4	EPA 300 NO2 / NO3	Hold	PCB by Sox 11/10/10			Total # of Cont.	Note #
3/5 Buttress 1-out (1-1½)	10/20/10	Concrete																										X				1	
3/5 Buttress 1-out (1½-2)																												X				1	
3/5 Buttress 3-out (0-½)																												X				1	
-01 3/5 Buttress 3-out (½-1)																												X	(X)			1	
3/5 Buttress 3out (1-1½)																												X				1	
-02 3/5 Buttress 6out (0-½)																												X	(X)			1	
3/5 Buttress 6out (½-1)																												X				1	
3/5 Buttress 12out (0-½)																												X				1	
6/8 Buttress 1out (1-1½)																												X				1	
6/8 Buttress 1out (1½-2)																												X				1	
6/8 Buttress 3out (0-½)																												X				1	
-03 6/8 Buttress 3out (½-1)																												X	(X)			1	

PRESERVATIVE (Cl - HCl, M=Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*

RELINQUISHED BY: (AFFILIATION)	DATE/TIME	RECEIVED BY: (AFFILIATION)
[signature]	10/21/10	[signature] 10/21/10 1645
[signature]	10/21/10 1820	[signature]

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

PCB sample on Hold Pending Authorization.

PROJECT MANAGER: David G Leone EXT. 5766

TURNAROUND TIME: (Standard) Rush___ Days, Approved by ________

LAB USE: TEMP. OF COOLER ______ °C ____ Temp Blank ____ Cooler Air ____

GZA GEOENVIRONMENTAL, INC.
~~Laboratory Division~~
One Edge Water Drive ~~106 South Street~~
Norwood MA ~~Hopkinton, MA 01748~~
~~(781) 278-4700~~
781-278-5766 FAX ~~(508) 435-9912~~

GZA FILE NO: 01.0019395 TASK NO: ________ P.O. NO. ________

PROJECT MDC – Nepaug Dam

LOCATION New Hartford CT

COLLECTOR(S) J Simmons, A Cote SHEET 1 OF 2

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Lab Returns to Proj. Mgr. GOLDENROD COPY - Proj. Mgr. Keeps

CHAIN-OF-CUSTODY RECORD ALPHA Job # E1016691 11/11/10 TF

W.O. #________ (for lab use only)

Sample I.D.	Date/Time Sampled (Very Important)	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., Other (specify))	Hold 11/12/10 TK	PCBbySox	Total # of Cont.	Note #
6/8 Buttress 3 out (1-1½)	10/20/10	concrete			1	
-04 6/8 Buttress 6 out (0-½)	↓	↓		(X)	1	
6/8 Buttress 6 out (½-1)	↓	↓			1	
6/8 Buttress 12 out (0-½)	↓	↓			1	

11/10/10 TK

ANALYSIS REQUIRED (printed columns): WW ONLY: 624, ☐ 601 ☐ 602, 625; ☐ 524.2 ☐ 502.1, 8260, 8260 - "8240" List, 8021, 8021 - "8010" List, 8021 - "8020" List, 8270 ☐ PAH ☐ A ☐ BN, 8081 Pest Only, TPH-GC (Mod 8100), ETPH (CT), Metals ☐ PPM-13 ☐ R-8, Metals (List Below)

PRESERVATIVE (Cl - HCl, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[signature]	10/20/10	[signature] 10/21/10 1645
[signature]	10/21/10 1820	[signature]

NOTES: Preservatives, special reporting limits, known contamination, etc.
Hold Samples Pending Authorization

PROJECT MANAGER: David E Leone EXT: 5766

TURNAROUND TIME: Standard Rush___ Days, Approved by ________ LAB USE TEMP. OF COOLER ____ °C

GZA GEOENVIRONMENTAL, INC.
ENGINEERS AND SCIENTISTS
~~120 Mountain Avenue~~
~~BLOOMFIELD, CT 06002~~
~~(860) 673-7965~~
~~FAX (860) 672-2416~~
One Edgewater Drive
Norwood MA
781-278-5766

GZA FILE NO: 01.0019395 P.O. NO.

PROJECT: MDC - NEPAUG Dam

LOCATION: New Hartford CT

COLLECTOR(S): V Simmons, H Cote SHEET 2 OF 2

GZAP-031

ANALYTICAL REPORT

Lab Number:	L1018692
Client:	GZA GeoEnvironmental, Inc. 1 Edgewater Drive Norwood, MA 02062
ATTN:	Dave E. Leone
Phone:	(781) 278-5766
Project Name:	MDC-NEPAUG DAM
Project Number:	01.0019395
Report Date:	12/01/10

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1018692
Report Date: 12/01/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1018692-01	3/5 BUTTRESS 6-OUT (1/2-1)	NEW HARTFORD, CT	10/20/10 00:00
L1018692-02	3/5 BUTTRESS 12-OUT (0-1/2)	NEW HARTFORD, CT	10/20/10 00:00
L1018692-03	6/8 BUTTRESS 6-OUT (1/2-1)	NEW HARTFORD, CT	10/20/10 00:00
L1018692-04	6/8 BUTTRESS 12-OUT (0-1/2)	NEW HARTFORD, CT	10/20/10 00:00

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1018692
Report Date: 12/01/10

CT DEP Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents)?	YES
1a	Were the method specified preservation and holding time requirements met?	NO
1b	VPH & EPH Methods Only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4°C ± 2°)?	YES
4	Were all QA/QC performance criteria specified in the CT DEP Reasonable Confidence Protocol documents achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody?	YES
5b	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	YES
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	NO

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or question B is "No", the data package does not meet the requirements for "Reasonable Confidence".

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1018692
Report Date: 12/01/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

RCP Related Narratives

Sample Receipt

In reference to question 1a:

The analysis of PCB was requested with the method required holding time exceeded and was performed at the client's request.

PCB

L1018692-01, -03 and -04 have elevated detection limits due to limited sample volume available for analysis, and due to the dilutions required by matrix interferences encountered during the concentration of the samples.

L1018692-02 has elevated detection limits due to the dilution required by matrix interferences encountered during the concentration of the sample.

In reference to question 4:

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1018692
Project Number:	01.0019395	**Report Date:**	12/01/10

Case Narrative (continued)

The surrogate recoveries for L1018692-01 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene and Decachlorobiphenyl (all at 0%) due to the dilution required to quantitate the sample. Re-extraction is not required; therefore, the results of the original analysis are reported.

Non-RCP Related Narratives

Total Solids

A laboratory duplicate could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Elizabeth Simmons

Title: Technical Director/Representative Date: 12/01/10

ORGANICS

PCBS

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1018692
Report Date: 12/01/10

SAMPLE RESULTS

Lab ID:	L1018692-01	Date Collected:	10/20/10 00:00
Client ID:	3/5 BUTTRESS 6-OUT (1/2-1)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	11/30/10 11:41
Analytical Date:	12/01/10 11:43	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	12/01/10
Percent Solids:	95%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	12/01/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	1180	--	10
Aroclor 1221	ND		ug/kg	1180	--	10
Aroclor 1232	ND		ug/kg	1180	--	10
Aroclor 1242	ND		ug/kg	1180	--	10
Aroclor 1248	ND		ug/kg	786	--	10
Aroclor 1254	ND		ug/kg	1180	--	10
Aroclor 1260	ND		ug/kg	786	--	10
Aroclor 1262	ND		ug/kg	393	--	10
Aroclor 1268	ND		ug/kg	393	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	A
Decachlorobiphenyl	**0**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150	B
Decachlorobiphenyl	**0**	Q	30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1018692
Report Date: 12/01/10

SAMPLE RESULTS

Lab ID:	L1018692-02	Date Collected:	10/20/10 00:00
Client ID:	3/5 BUTTRESS 12-OUT (0-1/2)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	11/30/10 11:41
Analytical Date:	12/01/10 11:57	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	12/01/10
Percent Solids:	96%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	12/01/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	263	--	5
Aroclor 1221	ND		ug/kg	263	--	5
Aroclor 1232	ND		ug/kg	263	--	5
Aroclor 1242	ND		ug/kg	263	--	5
Aroclor 1248	ND		ug/kg	176	--	5
Aroclor 1254	ND		ug/kg	263	--	5
Aroclor 1260	ND		ug/kg	176	--	5
Aroclor 1262	ND		ug/kg	87.8	--	5
Aroclor 1268	ND		ug/kg	87.8	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	99		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	114		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1018692
Report Date: 12/01/10

SAMPLE RESULTS

Lab ID:	L1018692-03	Date Collected:	10/20/10 00:00
Client ID:	6/8 BUTTRESS 6-OUT (1/2-1)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	11/30/10 11:41
Analytical Date:	12/01/10 12:10	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	12/01/10
Percent Solids:	95%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	12/01/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	2870	--	5
Aroclor 1221	ND		ug/kg	2870	--	5
Aroclor 1232	ND		ug/kg	2870	--	5
Aroclor 1242	ND		ug/kg	2870	--	5
Aroclor 1248	ND		ug/kg	1910	--	5
Aroclor 1254	ND		ug/kg	2870	--	5
Aroclor 1260	ND		ug/kg	1910	--	5
Aroclor 1262	ND		ug/kg	957	--	5
Aroclor 1268	ND		ug/kg	957	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	A
Decachlorobiphenyl	111		30-150	A
2,4,5,6-Tetrachloro-m-xylene	105		30-150	B
Decachlorobiphenyl	110		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1018692
Report Date: 12/01/10

SAMPLE RESULTS

Lab ID:	L1018692-04	Date Collected:	10/20/10 00:00
Client ID:	6/8 BUTTRESS 12-OUT (0-1/2)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	11/30/10 11:41
Analytical Date:	12/01/10 12:23	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	12/01/10
Percent Solids:	96%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	12/01/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1260	2770		ug/kg	398	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	A
Decachlorobiphenyl	121		30-150	A
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	121		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1018692
Report Date: 12/01/10

SAMPLE RESULTS

Lab ID:	L1018692-04	Date Collected:	10/20/10 00:00
Client ID:	6/8 BUTTRESS 12-OUT (0-1/2)	Date Received:	10/21/10
Sample Location:	NEW HARTFORD, CT	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	77,8082	Extraction Date:	11/30/10 11:41
Analytical Date:	12/01/10 12:23	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	12/01/10
Percent Solids:	96%	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	12/01/10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
CT RCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	596	--	5
Aroclor 1221	ND		ug/kg	596	--	5
Aroclor 1232	ND		ug/kg	596	--	5
Aroclor 1242	ND		ug/kg	596	--	5
Aroclor 1248	ND		ug/kg	398	--	5
Aroclor 1254	ND		ug/kg	596	--	5
Aroclor 1262	ND		ug/kg	199	--	5
Aroclor 1268	ND		ug/kg	199	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	A
Decachlorobiphenyl	121		30-150	A
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	121		30-150	B

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1018692
Report Date: 12/01/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 77,8082
Analytical Date: 12/01/10 12:37
Analyst: KB

Extraction Method: EPA 3540C
Extraction Date: 11/30/10 11:41
Cleanup Method1: EPA 3665A
Cleanup Date1: 12/01/10
Cleanup Method2: EPA 3660B
Cleanup Date2: 12/01/10

Parameter	Result	Qualifier	Units	RL	MDL
CT RCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01-04 Batch: WG445419-1					
Aroclor 1016	ND		ug/kg	60.0	--
Aroclor 1221	ND		ug/kg	60.0	--
Aroclor 1232	ND		ug/kg	60.0	--
Aroclor 1242	ND		ug/kg	60.0	--
Aroclor 1248	ND		ug/kg	40.0	--
Aroclor 1254	ND		ug/kg	60.0	--
Aroclor 1260	ND		ug/kg	40.0	--
Aroclor 1262	ND		ug/kg	20.0	--
Aroclor 1268	ND		ug/kg	20.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	96		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MDC-NEPAUG DAM

Project Number: 01.0019395

Lab Number: L1018692

Report Date: 12/01/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01-04 Batch: WG445419-2 WG445419-3								
Aroclor 1016	93		99		40-140	6		50
Aroclor 1260	96		73		40-140	27		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		75		30-150	A
Decachlorobiphenyl	115		86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		79		30-150	B
Decachlorobiphenyl	111		86		30-150	B

INORGANICS
&
MISCELLANEOUS

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1018692
Report Date: 12/01/10

SAMPLE RESULTS

Lab ID: L1018692-01
Client ID: 3/5 BUTTRESS 6-OUT (1/2-1)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95		%	0.10	NA	1	-	11/29/10 15:22	30,2540G	SD

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1018692
Report Date: 12/01/10

SAMPLE RESULTS

Lab ID: L1018692-02
Client ID: 3/5 BUTTRESS 12-OUT (0-1/2)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96		%	0.10	NA	1	-	11/29/10 15:22	30,2540G	SD

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1018692
Report Date: 12/01/10

SAMPLE RESULTS

Lab ID: L1018692-03
Client ID: 6/8 BUTTRESS 6-OUT (1/2-1)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95		%	0.10	NA	1	-	11/29/10 15:22	30,2540G	SD

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395
Lab Number: L1018692
Report Date: 12/01/10

SAMPLE RESULTS

Lab ID: L1018692-04
Client ID: 6/8 BUTTRESS 12-OUT (0-1/2)
Sample Location: NEW HARTFORD, CT
Matrix: Solid
Date Collected: 10/20/10 00:00
Date Received: 10/21/10
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96		%	0.10	NA	1	-	11/29/10 15:22	30,2540G	SD

Project Name: MDC-NEPAUG DAM
Project Number: 01.0019395

Lab Number: L1018692
Report Date: 12/01/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1018692-01A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1018692-02A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1018692-03A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)
L1018692-04A	Glass 100ml unpreserved	A	N/A	2	Y	Absent	TS(7),CT-8082LL-3540C(14)

Container Comments

L1018692-02A

L1018692-03A

L1018692-04A

*Values in parentheses indicate holding time in days

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1018692
Project Number:	01.0019395	**Report Date:**	12/01/10

GLOSSARY

Acronyms

EPA · Environmental Protection Agency.

LCS · Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD · Laboratory Control Sample Duplicate: Refer to LCS.

MDL · Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS · Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD · Matrix Spike Sample Duplicate: Refer to MS.

NA · Not Applicable.

NC · Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI · Not Ignitable.

RL · Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD · Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

Report Format: Data Usability Report

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1018692
Project Number:	01.0019395	**Report Date:**	12/01/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	MDC-NEPAUG DAM	**Lab Number:**	L1018692
Project Number:	01.0019395	**Report Date:**	12/01/10

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

77 Connecticut DEP Quality Assurance and Quality Control Requirements for SW-846 Methods. CTDEP Reasonable Confidence Protocols (RCPs). Version 1.0, July 2005.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised July 19, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))
Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)
Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)
Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME DRO, ME GRO, MA EPH, MA VPH.)
*Solid Waste/Soil (*Organic Parameters: ME DRO, ME GRO, MA EPH, MA VPH.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water
Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)
(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)
353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B.
Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)
(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.
Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D
Non-Potable Water
Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)
(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)
245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)
Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)
Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)
Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)
Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500Cl-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, S\M3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)
Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)
Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NY-DOH Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 120.1, 9050A , 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035, MassDEP EPH, MassDEP VPH.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

CHAIN-OF-CUSTODY RECORD

ALPHA Job # ~~L1018611~~ L1018692

W.O. # _____ (for lab use only)

Sample I.D.	Date/Time Sampled	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., P=Product, Other (specify))	ANALYSIS REQUIRED	Total # of Cont.	Note #
3/5 Buttress 1-out (1-1½)	10/20/10	Concrete	PCB Soil Ext.	1	
3/5 Buttress 1out (1½-2)				1	
3/5 Buttress 3-out (0-½)				1	
3/5 Buttress 3-out (½-1)				1	
3/5 Buttress 3out (1-1½)				1	
3/5 Buttress 6out (0-½)				1	
18692.1 3/5 Buttress 6 out (½-1)			X	1	
2 3/5 Buttress 12out (0-1½)			X	1	
6/8 Buttress 1out (1-1½)				1	
6/8 Buttress 1 out (1½-2)				1	
6/8 Buttress 3out (0-½)				1	
6/8 Buttress 3out (½-1)				1	
PRESERVATIVE (C - HCl, M-Methanol, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*					
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*					

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

10/20/10 10/21/10 1645

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

10/21/10 1820

RELINQUISHED BY: (AFFILIATION) DATE/TIME RECEIVED BY: (AFFILIATION)

NOTES: (Unless otherwise noted, all samples have been refrigerated to 4° C)
*Specify "Other" preservatives and containers types in this space.

PCB Sample on Hold Pending Authorization.

PROJECT MANAGER: David G Leone EXT: 5766

GZA GeoEnvironmental, Inc.
~~Laboratory Division~~
ONE Edgewater Drive ~~600 South Street~~
Norwood MA ~~Hopkinton, MA 01748~~
781-278-5766 ~~(781) 278-5700~~
FAX (508) 435-9912

TURNAROUND TIME: (Standard) Rush ___ Days, Approved by _____ LAB USE: TEMP. OF COOLER _____ °C Temp Blank: ___ Cooler Air: ___

GZA FILE NO: 01.0019395 TASK NO: _____ P.O. NO. _____

PROJECT MDC - Nepaug Dam

LOCATION New Hartford CT

COLLECTOR(S) J Simmons, M Gotz SHEET 1 OF 2

L1018692

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Lab Returns to Proj. Mgr. GOLDENROD COPY - Proj. Mgr. Keeps

W.O. # _____ (for lab use only)

CHAIN-OF-CUSTODY RECORD ALPHA Job # [redacted]

Sample I.D.	Date/Time Sampled (Very Important)	Matrix A=Air S=Soil GW=Ground W. SW=Surface W. WW=Waste W. DW=Drinking W. Other (specify)	WWONLY	ANALYSIS REQUIRED	Total # of Cont.	Note #
6/3 Buttress 3 out (1-1½)	10/20/10	concrete		PCB Soil 6A	1	
6/3 Buttress 6 out (0-½)					1	
18692.3 6/3 Buttress 6 out (½-1)				X	1	
4 6/3 Buttress 12 out (0-½)				X	1	
PRESERVATIVE (Cl - HCl, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*						
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, T-Teflon, O-Other)*						

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[signature]	10/20/10	[signature] 10/21/10 1645
[signature]	10/21/10 1820	[signature]

NOTES: Preservatives, special reporting limits, known contamination, etc.

Hold Samples Pending Authorization

PROJECT MANAGER: David E Leone EXT: 5766

TURNAROUND TIME: Standard Rush ___ Days, Approved by _____ LAB USE TEMP. OF COOLER _____ °C

GZA GeoEnvironmental, Inc.
ENGINEERS AND SCIENTISTS

One Edgewater Drive
Norwood MA
781-278-5766

~~120 Mountain Avenue~~
~~Bloomfield, CT 06002~~
~~(860) 678-7865~~
~~FAX (860) 872-2416~~

GZA FILE NO: 01.0019395 P.O. NO. _____

PROJECT MDC - NEPAUG DAM

LOCATION New Hartford CT

COLLECTOR(S) V Simmons, H Cote SHEET 2 OF 2

GZAP-031